

# WABIP Newsletter



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**Inside This Issue**

Editorial, 2-3

Technology Corner, 4-6

Tips from the Experts, 7-9

Humanitarian News, 10-13

Best Image Contest, 14

WABIP News, 15-16

Education, 17-22

Research, 23-24

Links, 25



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## A Look Back at WCBIP/WCBE 2022 Marseille



**Philippe ASTOUL, MD, PhD**  
WCBIP 2022 President



**Hervé Dutau, MD**  
WCBE 2022 President

Looking back at the program, events and participants of WCBIP/WCBE 2022 in Marseille held from October 6-9, we are very delighted and proud to say that the congress was an outstanding success. The magnificent Palais du Pharo (built under Napoleon III – XIXth century) overlooking our 'Vieux Port' ('old Harbour') in Marseille down town and its modern integrated congress center was the setting for these two and a half days of rich encounters and unforgettable exchanges.

Despite a difficult period marked by the COVID-19 pandemic, a war next door, the economic difficulties of our daily lives and consequently an uncertain future, less than 1% of the 766 active participants (from 81 countries) used the remote system (mainly by speakers). This means two things: first, a long desire to meet up with colleagues after a prolonged frustration of on-site meetings and second, the fact that the interventional pulmonology community is a true family with in mind the necessity of continuous friendly collaborations, ideally physical, for sharing knowledge, for constructive criticisms, i.e., a continuous medical education in this perpetual fast-moving field. The congress offered high-caliber scientific sessions with emphasis on new bronchoscopy and pleural techniques, technologies and hands-on procedure workshops and it is hard to pick special moments among the 44 sessions (including 10 plenary sessions), 6 industry symposia and 6 workshops

allowing colleagues to have the opportunity to meet experts in dedicated fields.

Participants could note a balance, a new fact, between bronchology and what we will call 'pleurology' (pleural techniques including medical thoracoscopy), the latter, undoubtedly too long in the background, but which is an integral part of the interventional pulmonology and which broadens the importance of pulmonologists in this field. The sessions in which our surgeon colleagues took part emphasized this fact. In the same vein, the sessions dedicated to the learning of the different techniques were particularly followed and the evolution of a learning of the techniques by companionship toward a teaching 'step by step' with rigorous evaluation according to precise criteria defined by groups of work for each stage of acquisition must become the standard in the near future. For sure, collaborations between the different international associations are crucial to design a unique educational program for young (but also more skill) doctors involved in the interventional pulmonology. The 'teachers' need also to be taught to design and organize appropriate educational courses throughout the world. In another word 'to teach the teachers'.

The opening ceremony on Thursday night (Oct. 6) was an early indicator of positivity and success. After the president WCBIP 2022 welcome speech (your humble servant), that of the president of the WCBE (my collaborator and friend Hervé Dutau), of the presidents of the WABIP (Hideo Saka) and IBES (Jan Kasperbau-

er), several colleagues were awarded testifying to their commitment in the field of interventional pulmonology but also to the vitality of all participants of the WABIP recognizing significant contributions to bronchology and interventional pulmonology. This is how the various prizes were awarded to Martin Philips, Australia, (Gustav Killian Centenary Medal) for career achievements and clinical practices which made a significant impact on the art and science of bronchology, Septimiu Murgu, USA, (WABIP Dumon Award) for contributions to enhancing others' skills in rigid bronchoscopy and improving knowledge and understanding of central airway obstruction, Spasoje Popevic, Serbia, (Distinguish WABIP Regent Award), for significant contributions to the development of WABIP activities in Serbia and worldwide during his term as Regent, and finally Teruomi Miyazawa, Japan, (WABIP Lifetime Achievement Award), for outstanding achievements and contributions to the clinical practice of bronchology and interventional pulmonology and who granted to the on-site audience a very emotional video message thanking all the interventional pulmonology community for his carrier. Young doctors were not forgotten with the Heinrich Becker Young Investigator Awards for Research and Clinical Innovation given to Keisuke Kirita (Japan), Sandip Saha (USA), Øyvind Ervik (Norway). A special mention to the team from Sarawak General Hospital (Malaysia) which won the WABIP Video Festival (best imaging, best innovation, best scientific) with a video entitled 'Virtual Bronchoscopy Navigation (VBN) Guided Recanalization of Post Tuberculosis Right Main Bronchus Chronic Total Occlusion' (Author: Kho Sze-Shyang – Watch video at

[https://youtu.be/95Fjk\\_weTIU](https://youtu.be/95Fjk_weTIU))

During these two and half days of sharing many topics and discussions were related to early diagnosis, precision staging, and interventional therapies in the field of thoracic cancers but also of chronic inflammation of the airways (asthma, COPD) which will represent in the future through the ELVR, the cryoablation and other, a complementary armamentarium for the management of these diseases. The congress also covered other technologies or fields in bronchology and pleurology such as benign or malignant airway stenosis, cryobiopsy, thoracoscopy and other pleural procedures, trans thoracic modalities and IP education. Briefly to say that WCBIP 2022 showed a full spectrum of interventional pulmonology and we are very proud in Marseille to have been the setting for this beautiful specialty through the WABIP, which we thank very warmly as well as all colleagues for their trust, hoping to have lived up to it.

As presidents of the WCBIP/WBCE 2022, Philippe Astoul and Hervé Dutau wish to our Indonesian Colleagues a great success for the next WCBIP 2024 which will be held in Bali (October 23rd – 25th, 2024). Long live WABIP !

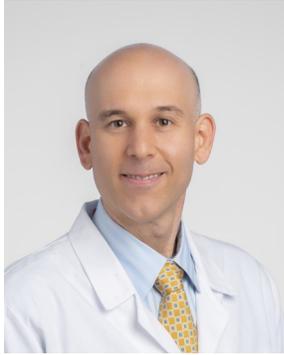
With our warmest regards,

**Philippe ASTOUL, MD, PhD**  
WCBIP 2022 President

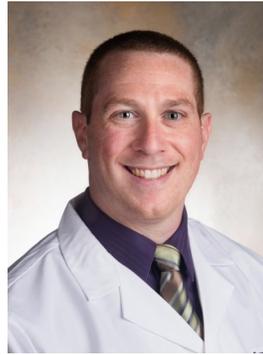
**Hervé Dutau, MD**  
WBCE 2022 President

# Technology Corner

## Utilization of Illumisite™ for Electromagnetic Navigation Bronchoscopy with Digital Tomosynthesis and Continuous Tip Tracking



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### Introduction:

Electromagnetic navigation bronchoscopy (ENB) is a minimally invasive technology that guides bronchoscopes and biopsy tools to pulmonary lesions. This technology has improved the ability to access peripheral lung lesions, but its historical diagnostic yield has been suboptimal. This limitation was related to several factors, including the lack of integrated real-time imaging to account for CT-to-body divergence and the lack of visualization of catheter position during the biopsy phase of the procedure. The latest evolution of ENB combines digital fluoroscopic tomosynthesis with continuous tip tracking in the Illumisite™ system (Medtronic, Plymouth, Minnesota, USA) to overcome these barriers. Initial studies using this modality have been promising.

### Background:

ENB uses a CT scan performed prior to the procedure to generate a virtual tracheobronchial tree so the proceduralist can create a virtual pathway to the target lesion. CT-to-body divergence occurs when the virtual position of the marked target on the CT scan, which is performed at total lung capacity in an awake, spontaneously breathing person, and the actual position of the lesion in the patient under anesthesia differ, leading to a significant challenge in obtaining a diagnostic specimen. Anesthesia protocols have been developed to mitigate this phenomenon, but they cannot completely compensate for the CT-to-body divergence.

Digital fluoroscopic tomosynthesis allows for correction of CT-to-body divergence during the procedure. After automatic registration is performed, navigation to the target nodule occurs in standard fashion. Catheter manipulation is performed manually allowing for maximal precision, and speed is dependent upon the operator; it is not limited by a mechanical drive system as with other platforms. Once the catheter is within 2 cm of the target lesion, local registration can be performed. This process utilizes a standard 12-inch 2-dimensional C-arm fluoroscope sweeping 50-degrees obliquely around the target lesion. With this newly acquired real-time data, digital tomosynthesis is utilized to obtain a 3-dimensional reconstruction of the area surrounding the target. The real-time location of the lesion and catheter is identified, marked, and updated to allow for adjustments prior to radial ultrasound evaluation and/or biopsy (Figure 1).

An additional feature of the Illumisite™ system is continuous real-time tip tracking of the catheter. Prior ENB platforms lose visuali-

zation of the target lesion and biopsy tool interaction when the locatable guide (LG) is removed from the extended working channel (EWC). With the Illumisite™ system, the cardinal directions of movement are integrated into the EWC to allow for the ability to visualize the interaction of the biopsy tool with the target lesion (Figure 2).

### **Clinical Application:**

#### *How we do it*

We perform our procedures under general anesthesia with neuromuscular blockade, fraction of inspired air (FiO<sub>2</sub>) between 40-60%, tidal volume of 6-8ml/kg ideal body weight and positive end expiratory pressure (PEEP) of at least 10cm H<sub>2</sub>O through an 8.5mm endotracheal tube. PEEP of 15cm H<sub>2</sub>O is used for patients with severe obesity. Patients are also preoxygenated with 80% FiO<sub>2</sub> in order to limit resorption atelectasis. After navigating to within 2 cm of the target lesion, the bronchoscope is attached to a stabilization system (Mediflex, Islandia, NY, USA).

Once local registration is launched, the adjustable pressure limiting (APL) valve on the ventilator is set to 15-20cm H<sub>2</sub>O (5cm greater than the PEEP level) and the alveolar pressure is allowed to reach the same plateau value as seen by the ventilator waveform. Manual compression of the anesthesia machine bag is avoided. A 50-degree fluoroscopic sweep is then performed during this breath hold maneuver, with the acquired data then processed by the Illumisite™ system. The sweep occurs over approximately 15 seconds.

#### *Supporting Literature*

Initial studies comparing the addition of digital tomosynthesis alone to traditional ENB (1) and the use of the Illumisite™ system (2-4) have shown promising results with minimal complication rates comparable to prior ENB studies. Introduction of fluoroscopic digital tomosynthesis to ENB improved diagnostic yield to 79% in 67 nodules compared to 54% in 101 nodules biopsied with ENB alone (1). Diagnostic yield with the Illumisite™ system ranges from 83-87% (2-4). Average reported corrected CT-to-body divergence was 12.2-15.4mm when utilizing the Illumisite™ system (1,3).

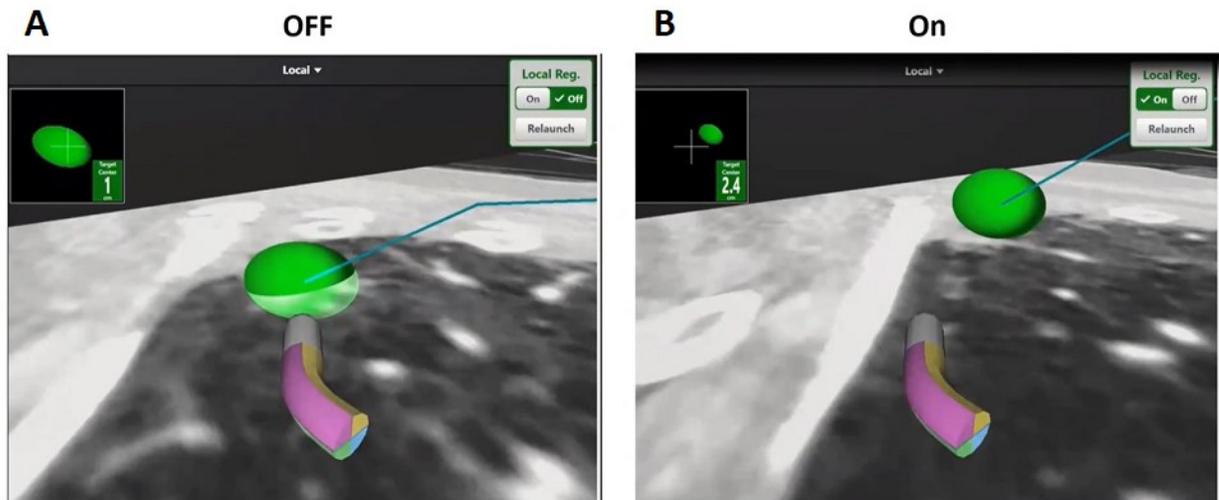
When assessing traditionally more challenging nodules that are smaller in size, defined as <2cm in diameter in all directions, and radiographic bronchus sign negative, results were also encouraging. In a prospective, single center study, 75% (n=54/72) of lesions that were <2cm in all dimensions were diagnostic, as were 79% (n=83/105) of bronchus sign negative lesions (4). A recent study comparing the Illumisite™ system with robotic bronchoscopy found comparable diagnostic yields of 80% and 77%, respectively (5). The safety profiles were also similar.

### **Conclusions:**

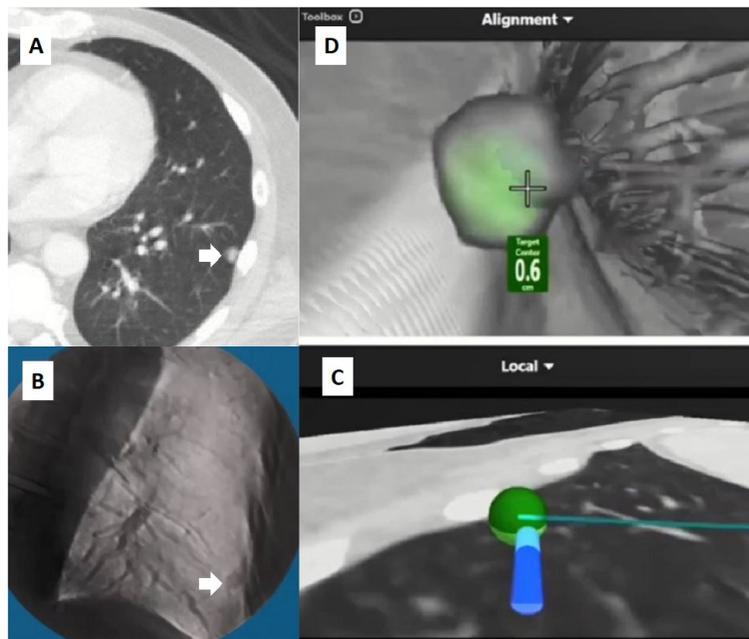
Efforts to improve results of diagnostic bronchoscopy for peripheral lung lesions have led to significant gains in the safety and accuracy of these procedures. Utilizing ENB with fluoroscopic digital tomosynthesis to identify the location of the target lesion location in real-time with continuous catheter tip tracking through the Illumisite™ system facilitates real-time biopsy tool-lesion interaction feedback and overcomes CT-to-body divergence. Initial studies show improved diagnostic yields, including for smaller lung nodules and those without a radiographic bronchus sign. Future studies evaluating the Illumisite™ system in comparison to other diagnostic bronchoscopy technologies and to TTNA will help inform which patients and which nodule characteristics may benefit from a specific biopsy approach.

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**Figure 1.** A) Position of the locatable guide (LG) after navigating to the virtual target but before local registration, which involves real-time imaging using digital tomosynthesis. B) Position of the LG after local registration. CT-to-body divergence resulted in 1.4cm of discrepancy between the nodule's preoperative and intraoperative location in this case. Catheter position can then be adjusted to account for this difference. (Images courtesy of Medtronic.)



**Figure 2.** A) Preoperative CT chest demonstrating a sub-centimeter semisolid pleural-based nodule (white arrow) directly behind a rib. B) The same nodule (white arrow) is made fluoroscopically visible by digital tomosynthesis during the local registration process, allowing the bronchoscopist to account for CT-to-body divergence and target the nodule's real-time position. C) Continuous tip tracking allows for visualization of the extended working channel's (EWC) exact position even after removing the locatable guide (LG). D) Targeting mode allows for precise biopsy from different regions of the target lesion, which can mitigate the impact of tumor heterogeneity. The operator can also mark each biopsy position virtually. (Images courtesy of Medtronic.)

## C-Arm Based Tomosynthesis for real-time Augmented Fluoroscopy imaging during Robotic Bronchoscopy



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### Introduction:

The widespread availability and use of computed tomography (CT) have led to increased nodule detection rate that prompted a need for improved technology to aid in diagnostic procedures. In the modern era of diagnostic bronchoscopy, there has been an advent of innovative platforms, including electromagnetic navigation bronchoscopy (ENB) and robotic-assisted bronchoscopy (RAB). However, bronchoscopists continue to have substantial challenges and have not achieved the diagnostic yield seen with a transthoracic approach [1]. One of the main reasons for this shortcoming is the presence of CT-Body Divergence (CTBD). Combining artificial intelligence (AI) guided real-time imaging such as C-arm Based tomosynthesis (CABT) with navigation platforms can potentially help improve diagnostic yield and accuracy.

### Indications:

ENB and RAB have proprietary software that uses a pre-procedure CT scan of the chest with a thin-slice protocol (1mm thickness) that is obtained at full inspiration (Total lung capacity - TLC) to build a virtual-navigation pathway for intra-procedural guidance. CTBD results from a physiological difference in lung volume that shifts airway anatomy and location of the lesion that may affect the intra-procedural accuracy. During the procedure, patients are under positive pressure and not at TLC, whereas during the CT they were at TLC, with a breath hold, and not under positive pressure. Furthermore, anatomical positional differences with respect to the positioning of the arms (upright), chest wall, which is expanded and lateralized at the time of imaging are different from the time of the procedure; the development of intra-procedural atelectasis secondary to lower lung volumes, higher FiO<sub>2</sub> during anesthesia, procedural time and bronchoscopic tool manipulation of the airway, may also contribute to the deviation of the actual real-time pathway from the prior virtual pathway created. This variation has been studied with a pre-procedure CT performed at full inspiration and expiration in 46 patients (85 lesions) that detected an average motion of 17 mm in all lesions [2]. Similarly, another study that looked at planning CT and intra-procedure CBCT reported an average divergence of 14 mm [3]. This has been documented and noted across several peripheral navigation platforms (ENB and RAB) [4].

The role of real-time imaging (CABT) to confirm lesion location serves an essential role in diagnostic procedures. For parenchymal lesions, depending on the location of the lesion, CTBD can significantly affect the relationship in the positioning of the tool and lesion. CTBD is noted to be highest in the lower lobes and although there are strategies that can be used to minimize CTBD and atelectasis (eg. adjusting ventilator settings), knowing a real-time relationship between tool and the target lesion adds significant value intra-procedurally and may increase the diagnostic yield when used in conjunction with navigation platforms [3,4].

### Planning:

For our procedures, we use the Monarch<sup>®</sup> system as the navigation platform (Auris Health, CA) and Lung Vision (Body Vision Medical Ltd, Israel) device for augmented fluoroscopic imaging, which connects to our standard OEC Elite c-arm (GE).

Body Vision's proprietary technology, Lung Vision, utilizes CABT which allows for updated confirmation of a lung nodule in real time based on tomosynthesis registration of the lesion. The system uses any standard C-arm to reconstruct a 3-dimensional intraprocedural image of the target, thus overcoming CTBD. Additionally, the Body Vision platform provides fluoroscopic visualization of pre-planned pathways and visualization of tool to lesion relationship, both of which can help fine-tune the bronchoscope's position regardless of the navigation platform used. A pre-procedure CT scan is uploaded to the tablet, and the lesion pathway is marked. A CT scan is also uploaded to the Monarch planning software which performs the airway segmentation and a virtual pathway is created to the lesion.

There are several ways to minimize CTBD. In our practice, we employ a ventilation protocol of PEEP of 10, a tidal volume of 6-8 ml /Kg pre-

dicted body weight, and a FiO<sub>2</sub> of 0.4 or less as allowed by oxygen saturation and hemodynamic stability. Once under general anesthesia, a 2-step registration is performed to integrate the pre-operative CT scan with the C-arm spin tomosynthesis. The first step is registration of the main carina which is performed with a C-arm spin typically from -35 degrees to +35 degrees (LAO to RAO) after which the C-arm is iso-centered on the lesion and registration of the lesion is performed with breath-hold with APL of 20cm. This process takes about 2-3 minutes. After registering the lesion, the C-arm is pulled back, and an inspection bronchoscopy is performed for airway surveillance to rule out central airway lesions and to clear secretions. After the survey, the robotic bronchoscope is introduced to navigate to the lesion. The bronchoscope is advanced till about 2cm from the lesion (Figure 1A). The C-arm is then iso-centered back on the lesion and final navigation and positioning is performed before sampling.

### Sampling:

After the final navigation is performed to the updated target location, a radial EBUS is advanced to identify and confirm the lesion location, proximity to the scope and to understand better the relationship with respect to the working channel to the best of the ability (Figure 1B). If no radial EBUS imaging is obtained (Figure 1C), as is the case in a semisolid and ground glass nodule, sampling is performed based on the target location obtained by tomosynthesis (Figure 1D). A biopsy tool, either needle or forceps, is used for sampling. Once the bronchoscope and tool are advanced to the lesion, another spin can be performed before the biopsy to visualize the tool-lesion relationship to obtain real-time feedback and confirm "tool in lesion". All biopsy specimens are then reviewed with the onsite pathologist to ensure adequate qualitative and quantitative sampling (Figure 1E). We terminate the procedure by slowly withdrawing the bronchoscope while ensuring that there is no bleeding with 5-10 ml saline irrigation.

Of note, we routinely use radial EBUS for our bronchoscopic procedures targeting lung nodules. Published data show increased yield in lesions that give a concentric view (84%) vs. eccentric view (48%) [5]. However, radial EBUS can give pseudo-assurance of positioning as it can be affected by atelectasis or tool-related manipulations that lead to microhemorrhages. At our institution, we performed a retrospective study of 45 patients who had a diagnostic bronchoscopy that combined these technologies with an average lesion size of 16 mm. A radial EBUS confirmation was obtained in 73% of cases, and an immediate diagnosis was obtained in 38 of 45 cases (84%); 32 cases were malignant and six were consistent with specific benign etiology. The other 7 lesions demonstrated inflammation (n=4) or were non-diagnostic/atypical (n=3). Of these 7, two had stable findings at 1-year follow-up and one had a surgical wedge biopsy that was benign, leading to an overall diagnostic accuracy in 41/45 (91%) [6].

### Quality control:

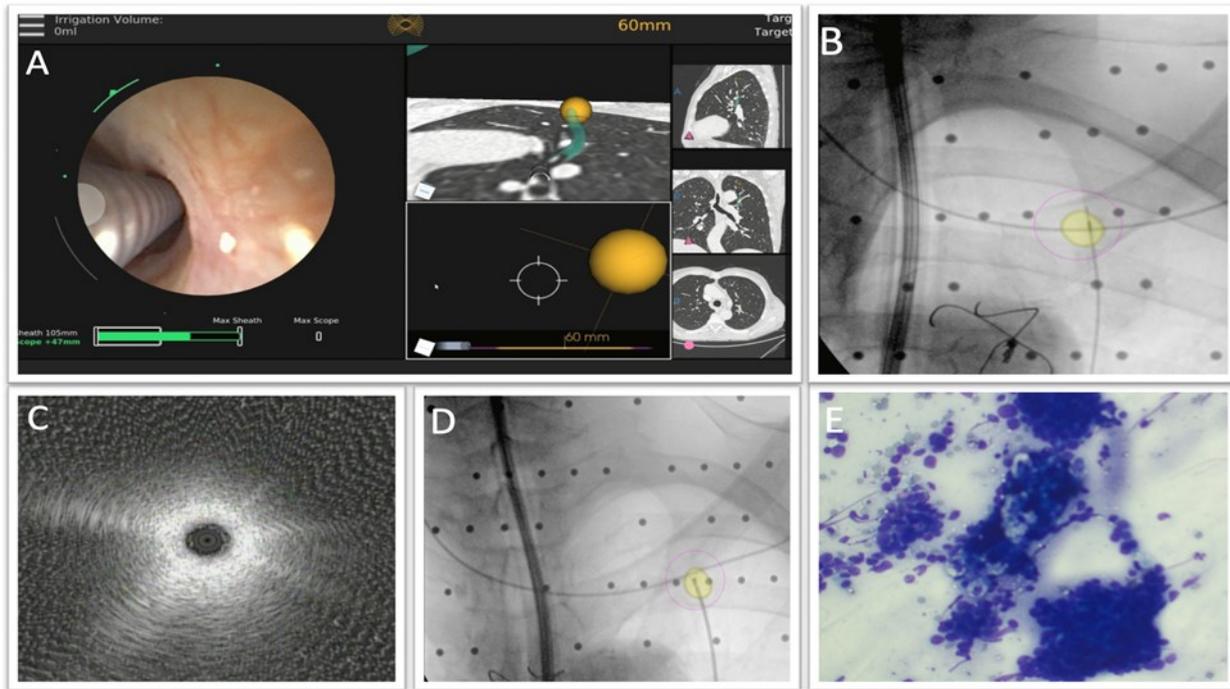
Real-time imaging is possible via radial EBUS and/or fluoroscopy (Cone-beam CT and CABT) to provide additional insight at the time of the procedure. While CABT represents a useful tool, the resolution needs to improve further. With the added use of CABT, increased radiation exposure, fluoroscopy time and procedure time is possible and studies evaluating these factors in CABT with RAB need to be performed. Currently, the radiation dose from a Lung Vision procedure is 1/3<sup>rd</sup> that of Cone Beam CT. The diagnostic accuracy even with use of real time imaging is not a 100% and there is limitation to the "tool in lesion" concept and a bronchoscopist must use appropriate clinical judgement in decision making in non-diagnostic cases.

### Conclusion:

Given the current ability of newer platforms to navigate further into the lung parenchyma, the use of augmented fluoroscopy to obtain intra-procedural imaging helps better define the tool-lesion relationship and assist the bronchoscopist in maneuvering while increasing the yield and accuracy in diagnosis of peripheral lung nodules, thus limiting the need for additional procedures.

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**Figure 1:** A: Robotic bronchoscopy Navigation, B: Radial EBUS advanced to the location of the nodule as determined on the CABT images post registration (Yellow spot marks the nodule), C: Radial EBUS advanced to the lesion but no ultrasonographic imaging of the nodule obtained, D: Biopsy of the nodule with forceps, E: Rapid onsite evaluation of the nodule biopsy showing non-small cell lung cancer with final path revealing poorly differentiated squamous cell lung cancer.

# Humanitarian News

## The Ethics of Migration in the Times of Pandemic and War

Expressions like “migration crisis”, “migration problematic” or even “migrant’s invasion” have filled the media in the last decade, brought the subject into our daily lives and made almost everyone coin a personal opinion based on different amounts of data or information about it. But with no doubt, ethics scholars as well as general public had to rethink and mostly re-frame their considerations about this topic with the arrival of two unprecedented stormy events: the COVID-19 pandemic and the massive refugee influx caused by the war in Ukraine.

We sadly have to admit that the international state system affords freedom of movement and residency rights to individuals in inverse proportion to the degree that they need them. Those with power and resources can – in ‘normal’ times – easily circulate between the world’s countries, while the impoverished and oppressed – including those who count as refugees under international law – face severe, life-threatening obstacles to finding liveable conditions. This situation arises from a system that gives states a rather discretionary power over who to admit onto their territory.

One deeply regrettable feature of the political world we inhabit is that, while everyone supposedly has a human right to seek and to enjoy in other countries asylum from persecution, in practice many people seek asylum and do not find it.

The discussion about rights and duties surrounding migration and freedom to travel is not new. But the mobility restrictions deployed against COVID-19 forced many people otherwise unaffected by border controls to confront the irritating question of who gets to move and why. The pandemic has called attention to the many reasons, from care to subsistence and the intrinsic value of feeling unrestricted.

Many people that would have never imagined having any restriction of their freedom of moving had faced for their first time the weird disruptions and reconfigurations that have occurred in our daily life since the emergence of COVID-19. Beyond the medical consequences that implied wearing PPE, over demands to healthcare workers, social distancing, lockdowns, some other social phenomena became central. Stigmatisation; data control, inaccurate information, exacerbation of racism, vaccines distribution, and political use of this uncanny outbreak, took shape in responses and reconfigurations in this new world configuration. In the specific realm of migration, pandemic times worsened the already dramatic experience of migration adding considerable anxiety and fears about the future. The closure of borders, restriction of travel and suspension of most international flights has completely altered the environment through which migration occurs and migrant lives can be established and sustained. While most governments have permitted the return of citizens and those with long-term residence rights, the fate of irregular migrants, asylum seekers, refugees, and guest workers made the conditions of survivability much more difficult and unstable by new restrictions. Additionally asylum seekers face another pause in the staggered and delayed process of gaining legal recognition; refugees are considered bioethical risks and were subject to enhanced restraint procedures; and guest workers lost their precarious informal jobs and any source of revenue but neither permitted to travel to countries where they lived.

At the same time, the public health crisis dramatically worsened pre-existing trends towards more restrictive and repressive modes of enforcement, including a mass shutdown of borders; a remarkable expansion in state surveillance and a spike in xenophobia and racism; all at a time when the economic and political circumstances are pushing millions across the globe into poverty and utter vulnerability.

In facing the news about the dramatic situation of migrants, general public comfort themselves with the idea that this situation is limited to those trying to enter illegally to some countries and that people in real danger of current persecution get their refugee status and may achieve a lawful freedom. With that perspective, there is nothing “unfair” in restricting the influx of the so-called “illegal migrants” who cannot formally qualify as refugees. But during the last years, the global refugee crisis has caused many relatively wealthy Western states to see a dramatic uptick in the number of people arriving on their territory to claim asylum. While there is a general agreement that these states have some obligation to refugees and asylum seekers, which precise obligations the states have is far from being established. It is not uncommon to hear that this obligation is considered a duty to rescue refugees from the harms created by their home countries. But what the duty to rescue refugees requires from relatively wealthy Western democracies for them to be able to say that has done its fair share is an unanswered question.

# Humanitarian News

Far from the ethical and legal discussion in international fora or academic environments, in the real world the figures show that, as relatively wealthy countries are very unlikely to accept all the refugees that claim for asylee, the best of the offered solutions is to “be rescued” in a refugee camp and wait for a legal permission to be relocated in other country, a permission which may be conceded or not. When we talk about a refugee camp, we mean the temporary settlements that are set up by the UNHCR to receive those who have left their countries, fleeing from persecution, war, or other forms of conflict. Their goal is to attend to the immediate needs of refugees who are seeking help by providing security, food, water, and medical care.

But the problem with refugee camps occurs when ‘temporary’ camps intended to help with immediate needs become long-term settlements. Refugees are given rations and a place to live but are usually not permitted to work or move around within the country. Refugee camps are often places of insecurity and abuse, imposed idleness and reduced autonomy, and hold very little hope of seeing something better in the next future. As pointed out for McDonald-Gibson, a refugee camp is emotionally too close to be in jail, putting your life on pause, receiving just enough food and water to survive, but with no chance at all to provide for a family or plan for a future.

In the 21st century, only about 1% of refugees will be resettled in a given year, 2% will be able to return home, and the vast majority will spend on average 17 years as a refugee either in a camp or informally in a city with little access to international aid. The 10% of refugees who seek asylum directly in the West must risk their lives, overcome brutal restriction policies and spend their whole life savings just to survive those perilous trips.

Given the conditions in a refugee camp, it is understandable that many refugees reject them and increasingly choose to go to cities, where they live informally (that is, without being formally registered with the UNHCR or the local government). That behavior has some advantages as they maintain their freedom of movement, can live where they want and can come and go freely. But they pay it with the huge disadvantage of not receiving assistance from the international community in terms of housing, food, health care or education when they are outside of refugee camps. As an example, fewer than 1 in 10 Syrian refugees in Turkey, Lebanon and Jordan receive any material support from the UN or its partners. Though help with food, health care and education may not be adequate in camps, the virtual absence in urban centres can be devastating. Even when many refugees are able to find some work, it is often well below what is needed to survive, forcing refugees to ask for some help from their children adding some small income. This in turn results in insurmountable barriers to going to school. According to Amnesty International most of Syrian refugee children in Turkey remain without access to primary education.

Some authors argue that thinking about moral obligations purely in terms of duties of rescue obscures the role that rescuing states have played in creating and sustaining the conditions of violence, insecurity and poverty in their countries of origin and (directly or indirectly) have contributed to many of the harms that refugees experience as they seek refuge. The role of the Western states (that are so proud of being the strongest democracies in the world) is not solely one of rescue, but of creators and supporters of a system that helps few, harms some and makes it nearly impossible for most of them to access the minimum conditions for human dignity

If we accept the reality that many states are unlikely to accept as many refugees as they ought, though some refugees will be admitted, many with firm claims will be wrongfully rejected. Are some ways of wrongfully rejecting refugees less objectionable than others? Is then morally justifiable to give priority to refugees who flee from worse forms of discrimination or persecution or any other kind of “prioritization”? If guided by the international law rules, we should not be primarily concerned about refugees arriving in recipient states that formally apply for asylum. If those cases the question about ‘priorities should become a question about clearly defining the principles that determine who is granted the legal status of a refugee and who should receive asylum and consequently all those filling the requirements, should be accepted. Which also means that if a state grants someone the legal status of a refugee under international conventions, then it would be illegal to deny the person asylum based on any extra considerations of prioritization.

However, we have to face the uncomfortable question about which real and varied factors impinge on the reception of refugees Or even more dramatically told: are some refugees more worthy than others?

Since 2011, more than six and a half million people—from Syria, Afghanistan, Venezuela, Eritrea, and other countries—have sought asylum in Europe. Nationalists across the Continent have made antipathy toward such migrants a cornerstone of their agendas. Refugees have even been called “Muslim invaders.” In Poland, in 2021 migrants and asylum seekers (most of

# Humanitarian News

them from Iraq and Afghanistan, trapped on Belarus's borders with Poland and Lithuania) tried to cross its border with Belarus and were brutally pushed back by security forces with water cannons and tear gas. However, we can see that after the conflict in Ukraine most of the European Union political leaders have said publicly that refugees from Ukraine are welcome and countries have been preparing to receive refugees on their borders with teams of volunteers handing out food, water, clothing, and medicines. Slovakia[and Poland have said that refugees fleeing the war in Ukraine will be allowed to enter their countries even without passports, or other valid travel documents; other EU countries, such as Ireland, have announced the immediate lifting of visa requirements for people coming from Ukraine. Even free public transport and phone communication is being provided for Ukrainian refugees. Legal reforms are being prompted that may allow refugees from Ukraine be offered up to three years temporary protection in EU countries, without having to apply for asylum, conceding rights to a residence, permit and access to education, housing, and the labour market

Of course, facing such a huge crisis as this war is, that generous collaboration is welcome and perfectly understandable. The horrific situations created by the Russian invasion to Ukraine turned thousands and thousands of people into refugees from one week to the other, triggering one of the largest and fastest refugee movements that Europe has witnessed since the end of World War and the one of the largest humanitarian crisis that Europe has seen. But we should remember that it was not so long ago that the continent faced another critical humanitarian challenge, the 2015 refugee "crisis" spurred by the conflict in Syria.

The current refugees fleeing from Ukraine made their way to the borders of Poland, Slovakia, Romania, and Hungary. But unlike many others who, over the past decade, have sought to escape conflict and oppression by fleeing to European countries, they were welcomed inside. We have heard (and found it natural?) some reporters covering the war saying "These are not refugees from Syria. . . . These are Christians, they are white, they're very similar to the people that live in Poland." Or referring to Kyiv, "With all due respect, these people do not come from Iraq or Afghanistan or Syria, they come from a relatively civilized, relatively European city." We have also witnessed that the non-European refugees from Ukraine (thousands of Africans living in Ukraine, mainly students), struggled to enter Poland and other countries as refugees being violently stopped by the Ukraine authorities at the border or unwelcome in any of the receiving countries.

This current scenario obliges all of us as mankind to reflect on the utterly different responses the Western world has had at these two situations of "humanitarian crisis". It should provide a cautionary lesson for those hoping for a more humane, generous Western democracies. This is indeed how the international refugee protection regime should work, especially in times of crisis: countries keep their borders open to those escaping wars and conflict; temporary elimination of unnecessary identity and security checks; permission to arrive without valid identity and travel documents; and of course, no detention measures or impediment to freely join family members in other countries. Communities and their leaders should always welcome refugees with generosity and solidarity.

Betts and Collier argue that providing refuge 'is about fulfilling our duty of rescue'. According to them, the duty of rescuing refugees is born out of a common humanity that we share with other human beings. It creates moral obligation to assist strangers who are in desperate need when we can do so at no significant cost to ourselves, so, the well-known principle of the Good Samaritan. An the parable of the Good Samaritan points out that there is no connection between the rescuer, the Samaritan, and the person in need of help; the Good Samaritan simply helps out of human decency, not because they were responsible for harming the person lying by the side of the road.

On the one hand, we are urged to confront the uncomfortable electoral reality of widespread public hostility towards greater immigration, and the increasing acceptance of the immense suffering caused by real-world border enforcement practices and the undisputable racism that lays under those "public opinions". It implies that how ambitious the migration and asylum law reforms should be in order to fulfill the moral call will be a matter of vigorous dispute at a time when fundamental assumptions about movement and membership are in question.

However, it should be considered that the world today is parcelled up between sovereign states whose legitimacy derives from their role in protecting the human rights of those individuals within their territory. Owen argues that the mere existence of refugees is always evidence that some states are failing in their role, requiring international society to offer substitute protection. In his words, the institution of refugeehood acts as a 'legitimacy repair mechanism' that reaffirms 'the minimal conditions of the imagined reconciliation of an international order of sovereign states and a cosmopolitan order of human rights'. It means that the protection of refugees not only answers to the morally urgent need of the world's most vul-

# Humanitarian News

nerable groups; it functions as a global 'public good' from which all states benefit in terms of their legitimacy.

The Ukraine refugee crisis presents the Western countries with not only an important opportunity to demonstrate their generosity, humanitarian values, and commitment to the global refugee protection regime; it is also a critical moment of reflection: it is the moment to analyse if the peoples all over the world may be able to overcome their widespread racism and animosity and make the universalist spirit of the 1951 Refugee Convention something more than worthless pages. In fact, the Article 3 of the Convention is quite explicit when saying that all member states "shall apply the provisions of this Convention to refugees without discrimination as to race, religion or country of origin." We have to face the atmosphere of the moment and respond ourselves truthfully if all the international organisations, international conventions and laws, really rule our global connivance or are just decorative disrespected documents to be ridiculed or manipulated by the social actors holding the real power.

Many humanitarians doubt that the current change in mood toward refugees escaping Ukraine will affect the migrants risking their lives on the Mediterranean. It may be too late to undo the damage of strong xenophobic politics. But the triumph of exclusionary nationalism is by no means inevitable. The COVID-19 has provided undeniable evidence of humanity's shared vulnerability and interdependence. We should have learnt that the entire world is our neighbourhood and that nobody can get security and salvation by his or her own. The hope is that seeing so clearly the double standards applied to migrant and asylum seekers and having understood our interdependence just as members of the human race, we will be able to acknowledge that the current status quo is deeply unfair and revisit some fundamental principles regarding border controls.

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*\*The views expressed in this article are those of the author (Silvia Quadrelli) and do not necessarily reflect the official positions of the Executive Board or International Board of Regents of the WABIP.*

# Best Image Contest

## Best Image Contest 2023 (1 of 3)



**Description:**

Endobronchial Rhinosporidiosis

- A. Tracheal mucosal infiltration with strawberry like growth
- B. Complete occlusion of right main bronchus due to endobronchial growth
- C. Endoluminal growths in bilateral main bronchi
- D. Histopathological image Mature sporangia with thick chitinous wall containing multiple endospores

**Submitters:**

Preeti Vidyasagar, Harikishan Gonuguntla

This image is 1 of 3 selected among 100+ submissions to our Best Image Contest held in late 2022. Our next Image Contest will open later this year. We look forward to receiving your image submissions.

# WABIP News

## Interventional Pulmonology Institute of the WABIP in Turkey is Coming Soon

The first Interventional Pulmonology Institute (IPI) of the World Association for Bronchology and Interventional Pulmonology (WABIP) will inaugurate in May 2023 at the LIV hospital, Istanbul. The innovative idea of teaching and training in Interventional Pulmonology to doctors from around the globe was created and motivated by Prof. Ali I. Musani. His novel concept is poised to gather international fellows and the WABIP faculty to the first IPI at the Liv Hospital.

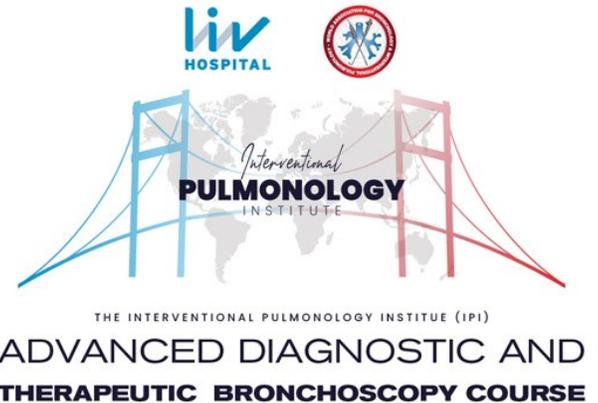
We look forward to launching the Institute on February 25th, 2023, with an “Advanced Bronchoscopy Conference.” The Inaugural meeting will offer a comprehensive program on advanced diagnostic and therapeutic bronchoscopy. The president of the WABIP, Stefano Gasparini; head of Institutes Ali Musani; and other distinguished international and local faculty will visit the Liv Hospital and discuss final plans with the leadership of the Liv hospital. After this meeting, WABIP and Liv Hospital will officially sign the contract that will connect the world’s largest international organization of interventional pulmonologists and a private hospital system to democratize knowledge, healthcare, and science for all the worlds.

The fellowship program of institute will accept its first fellow in the summer of 2023. The curriculum and fellowship selection committee chairs, Lorenzo Corbetta (Italy) and Javier Flandes (Spain) are working hard at finalizing the tasks assigned to their committees. Fellowship applicants can send their inquiries to Dr. Dalar at [Levent-dalar@gmail.com](mailto:Levent-dalar@gmail.com) and Dr. Flandes at [jflandes@quironosalud.es](mailto:jflandes@quironosalud.es)

We look forward to a new beginning in Interventional Pulmonology on the Global Horizon.

Levent Dalar MD.

Site Director IPI, LIV Hospital, Istanbul.



## WABIP Visiting Scholar Travel Grant Continues

I am very proud and happy to be a recipient of the WABIP Visiting Scholar Travel Grant, being awarded this honor back in 2019. Prof. Venerino Poletti from Italy had caught my attention as I was reading his papers and book on Transbronchial Cryobiopsy, Interstitial Lung Diseases and other interventional procedures. I was very gracious to have the professor and his colleagues accept me as a trainee, but then the pandemic hit, and it forced me to delay my training.

Finally in 2022 when the severity of the pandemic had greatly decreased, it was finally my opportunity to revisit the WABIP travel grant awarded to me years earlier. I contacted Professor Poletti again, and started to make arrangements for my training.



Dr. Sangit Kasaju (trainee), Prof. Venerino Poletti, Prof. Claudia Revaglia

## WABIP News

I have arrived GB Morgagni Hospital, Forli, Italy in first week of December 2022. I was amazed by their bronchoscopy suits ( Endoscopia toracica). I have able to meet other faculty members, residents, nurses and whole team. I have found out that Professor Venerino Poletti is very famous clinician here and this hospital is referral center in Bologna region. They have been so kind and extremely helpful. I am also amazed to see volumes and varieties of cases they handle. On my first day I have able to seen and have assisted Cryobiopsy, EBUS, Transesophageal bronchial biopsy; Bronchial lavage, Rigid and Flexible bronchoscopy. I have seen total left side lung lavage for pulmonary alveolar proteinosis, which is rare lung diseases and this procedure is only done in this hospital in this region according to doctors here. I have been impressed also with their efficient and dynamic team here and they have been making complex procedures so simple. This did inspire me a lot. I able to do even flexible bronchoscopy and bronchial lavage on my own on my second day, guided by them. I have also attended multi disciplinary grand rounds together with whole faculties, pathologists , radiologists. They presented cases even in english just for me although they used to do in Italian language usually. I am seeing very interesting cases scheduled for coming weeks for procedures. These cases excite me a lot. and even I'm wishing if i can extend for longer duration so I can learn at depth.



I would like to thank WABIP for granting me this grant, Prof Henri Colt past Chair of WABIP for visiting NCCP, international congress in Nepal and encouraging me to establish NABIP affiliated with WABIP and Professor Venerino Poletti, Professor Claudia Revaglia and whole team for making my stay wonderful learning experience. I hope I can reciprocate knowledge I gained here to my colleagues in Nepal and I do believe my fellow countrymen will surely benefit from this.

Thank you!

**Sangit Kasaju, M.D. (Nepal)**

WABIP Visiting Scholar Awardee

# Education

## First WABIP/Chile Interventional Bronchoscopy Workshop

On December 5th and 6th, the very first WABIP activity in Chile was held. This was the 3rd attempt to organize a WABIP/Chile event that was repeatedly delayed because of the epidemiological conditions. Happily, finally pandemia has given us a break to gather our colleagues who were eagerly expecting this educational event at the Centro Cultural El Tranque, one of the most selected faculties in Latin America and Europe. That Centre is a modern, fully equipped and with a permanente staff trained to support and provide the best logisting for surgical and endoscopical procedures simulation.

With the great support of Clínica Meds and the new Chilean IB center, we did a theoretical / hands-on course focused in advanced techniques, that included: EBUS, rigid bronchoscopy, laser ablation, metallic and silicone stenting and cryobiopsy. In this last technique, we had the honor to receiving the invaluable presence of one of the most important figures in this field, Dr. Sara Tomassetti from Florence, Italy. An outstanding teacher who shared her expertise with patience, sophisticated educational skills and incredible kindness.



**Sara Tomassetti sharing her expertise**

As an organizer I'm very thankful of the kind and unconditional participation of our international professors:

- Dr. Artemio García (Argentina)
- Dr. Fernando Monge (Perú)

And the none less important support of our great local Chilean faculty:

- Dra. Macarena Rodríguez
- Dr. Arturo Morales
- Dr. Felipe Undurraga
- Dr. Alfredo Jalilie

# Education



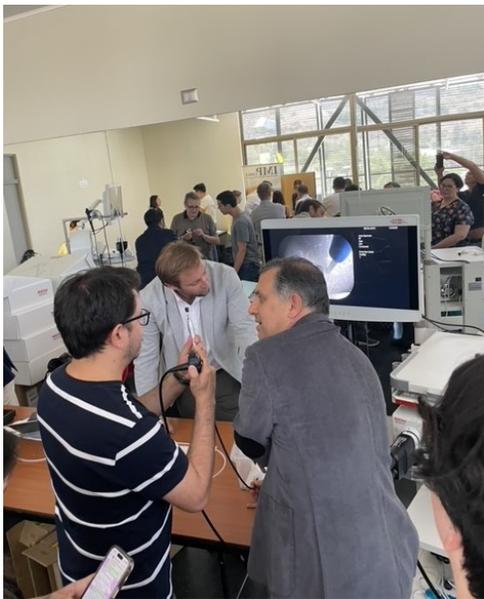
Some of the regional instructors of the WABIP workshop in Chile



Artemio García, a regular tireless instructors in so many WABIP hands-on sessions.

The event was very successful and all our attendees (mainly bronchoscopists with an intermediate level of previous training) found the experience not only very useful but also incredibly inspiring to increase their own interest in bronchoscopy and in training other colleagues themselves. I hope that this was the first of many future events of cooperation between the Chilean bronchoscopists and our worldwide Association . We pledge to actively work to help WABIP to grow and get stronger to be able to give this same opportunity to many of our colleagues all around the world.

# Education



**Several stations fully working in the hands-on practice of different techniques.**

We finally render thanks to WABIP and its Executive Board for the unlimited support they permanently show for the bronchoscopy education. The tireless work of the WABIP leadership made this possible in spite of the incredible obstacles posted by the pandemic.

Dr. David Lazo P.  
Director First WABIP/Chile Interventional Bronchoscopy Workshop.  
Chile Regent

# Education

## WORKSHOP WABIP IN ECUADOR

Celebrating the return of the onsite activities, WABIP has re-started its traditional training programs.

Dr. Rocío de Janon, Regent of the Ecuadorian Society of Tisiology and Thorax Diseases, organized and chaired a wonderful workshop with very active hands-on sessions. The event occurred on November 17-18, 2020 in one of the largest hospitals in the country, Hospital de Especialidades Teodoro Maldonado Carbo in Guayaquil city, where Dr. De Janon (as a Chair of Respiratory Medicine) and her group have developed a compelling bronchoscopy unit.



**The organizing team with the instructors**

This II Bronchoscopy course-workshop, sponsored by WABIP and the Ecuadorian Society of Tisiology and Thorax Diseases had the participation of 30 specialists in respiratory medicine who are already working in bronchoscopy and who have a basic or intermediate level of previous bronchology training.

WABIP gathered for this very meaningful educational event some of its most experienced instructors: Dr. Fabien Maldonado (USA), Artemio García (Argentina), Marco Solís (Bolivia) and Silvia Quadrelli (Argentina).

After the didactic lectures in the morning, attendants worked at different stations, including flexible bronchoscopy, cryobiopsy, rigid bronchoscopy, EBUS and conventional TBNA .

Every single participant had the opportunity to practice each technique in the different inanimate models under the meticulous guidance of the instructors.

A great experience, beautifully organized by Dr. De Janon's team and highly valued by all participants, which allowed everyone to get in contact with the WABIP experts during 2 full days, in a warm ambiance of comradeship, curiosity and enthusiasm.

WABIP thanks the enormous effort made by the organizing team and the invaluable contributions of its instructors, who selflessly help the Association to disseminate bronchoscopy training throughout the world in order to create safer, more reliable and fully comfortable procedures for every patient in every country.

# Education



**Dr. Fabien Maldonado teaching rigid bronchoscopy**



**Dr Artemio García working at the EBUS station**



**Marco Solís Dr training in cryobiopsy**

# Education

## Workshop of Advanced Diagnostic and Therapeutic Bronchoscopy in High Fidelity Cadaveric Models in Uruguay



On November 29th WABIP co-sponsored, with the Uruguayan Society of Pneumology, the first bronchoscopy workshop with high fidelity cadaveric models in Uruguay.

The activity occurred in Maciel Hospital, one of the oldest national statal school hospitals in Montevideo, with the participation of prestigious international professors: Dr. Juergen Hetzel from Germany and Dr. Artemio Garcia from Argentina.

Almost 30 pulmonologists and thoracic surgeons with basic bronchoscopy skills participated in enhancing their training to create safer, more reliable, and fully comfortable bronchoscopic procedures.

Special thanks to the enormous effort made by the organizing team and the invaluable contributions of its local instructors (Dr. Nicolas Arechavaleta, Dr. Eduardo Quintana, Dra. Ana Gruss from The Pneumology Department at the Faculty of Medicine and Dr. Wiliam Baptista, Dr. Manuel Da Fonte and Dr. Florencia Picaroni from The Clinical Simulation Unit of the Uruguayan Society of Anesthesiology), who selflessly helped to disseminate bronchoscopy training.





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## Research

### The List of Bronchoscopic Therapies Goes On! Bronchoscopic Treatment of Chronic Bronchitis - Bronchial Rheoplasty!



**Ali I. Musani MD, FCCP**  
University of Colorado School of Medicine,  
Denver

Chronic Bronchitis is a chronic, progressive disease with debilitating symptoms. Medical management of this disease is often unsuccessful. Several innovative bronchoscopic treatments focused on the ablation and destruction of hypertrophied submucosal glands and hyperplastic goblet cells are being tested in animal and human models. Some therapeutic modalities include liquid nitrogen metered cryospray and Bronchial Rheoplasty (BR). Another modality with a slightly different mode of action being tested is targeted lung denervation (TLD), which aims to decrease the release of acetylcholine, which regulates smooth muscle tone and mucus production by ablating the parasympathetic nerves along the main bronchi. These modalities are at different stages of clinical trials and promise decreased exacerbation frequency, reduced chronic bronchitis symptoms, and improved quality of life.

Bronchial Rheoplasty uses an endobronchial catheter deployed through the working channel of a flexible bronchoscope to apply nonthermal pulsed electrical fields to the airways. Each lung is treated at a different time, approximately one month apart.

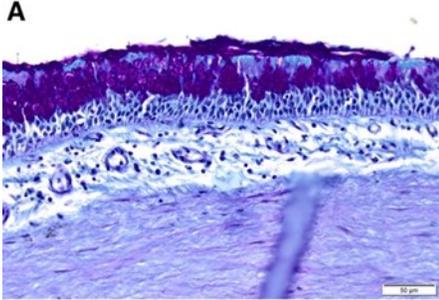
Recently, a study published in the American Journal of Respiratory and Critical Care Medicine (1) established the safety and efficacy of Rheoplasty in patients with severe chronic bronchitis. In this study, two prospective, multicenter, single-arm clinical studies under two nearly identical protocols recruited patients at five tertiary academic centers in Austria, Australia, and Chile.

Bronchial Rheoplasty was performed in all 30 patients, with a mean age of 67; mean postbronchodilator FEV of 65%; mean COPD Assessment Test score of 25.6; mean SGRQ score of 59.6. There were no device-related and four procedure-related serious adverse events through 6 months, and none after that through 12 months. The most frequent nonserious, device- and/or procedure-related event through 6 months was mild hemoptysis in 47% (14 of 30) patients.

Histologically, the mean goblet cell hyperplasia score was reduced by a statistically significant amount ( $P < 0.001$ ). Significant changes from baseline to 6 months in COPD Assessment Test (mean,  $-7.9$ ; median,  $-8.0$ ;  $P = 0.0002$ ) and SGRQ (mean,  $-14.6$ ; median,  $-7.2$ ;  $P = 0.0002$ ) scores were observed, with similar observations through 12 months. The histological findings, as shown in fig 1 (1), show a significant reduction in the number of epithelial goblet cells, particularly in those patients with pretreatment evidence of moderate-to-severe goblet cell hyperplasia.

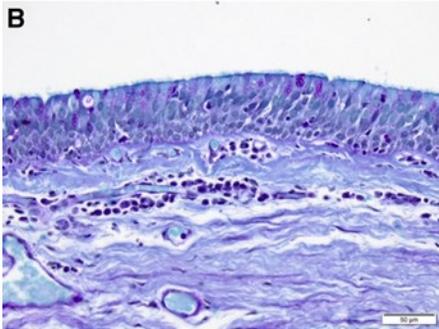
# Research

This study provides proof of concept and the first clinical evidence of the feasibility, safety, and initial outcomes of BR in symptomatic patients with chronic bronchitis. This study has limitations, including a small sample size and a lack of a control group. Therefore, large, randomized, and prospective studies are required despite clinical and histologic evidence supporting improvements.



**Figure 1.** Histological findings from the right bronchus intermedius of a study patient. The goblet cells, with magenta-colored cytoplasmic mucin highlighted by periodic acid–Schiff staining, are seen in the superficial bronchial epithelium. (A) On Day 0, immediately before therapy, significant goblet cell hyperplasia can be seen (score of 2). (B) Right bronchus intermedius 120 days after the initial treatment, demonstrating complete regeneration of the pseudostratified columnar epithelium with a reduction of goblet cell numbers (semiquantitative assessment score of 1).

\*This figure was used with permission from the American Thoracic Society .



## Reference:

1. Valipour A et al.; J. Am J Respir Crit Care Med. 2020 Sep 1;202(5):681-689. doi: 10.1164/rccm.201908-1546OC. PMID: 32407638; PMCID: PMC7462406.

## WABIP ACADEMY- WEBCASTS

The WABIP has started a new education project recently: *THE WABIP ACADEMY*. The WABIP Academy will provide free online webcasts with new and hot topics that will interest pulmonologists and interventionalists.

Current webcast topic: **Tissue acquisition for biomarker directed therapy of NSCLC**

Webcast

---

Small Sample Tissue Acquisition and Processing for Diagnosis and Biomarker-driven Therapy of NSCLC

Welcome to WABIP's free online learning tool to increase knowledge regarding the appropriate selection, acquisition, and processing of cytology and histology samples from patients with known or suspected lung cancer.

Click an icon to begin



Program Description



Purpose



General Learning Objectives



Specific Learning Objectives

[TABLE OF CONTENTS >](#)

Each fictitious clinical case scenario is based on a conglomerate of real patient data. Cases have been modified to avoid any possibility for patient identification and to help meet educational objectives. Any resemblance to real persons, living or deceased, is purely coincidental.

The content for these webcasts has been developed by members of the World Association for Bronchology and Interventional Pulmonology. All content was reviewed by an independent multidisciplinary team of experts. Unless otherwise specified, all content is the property of WABIP.

A collaborative project with Pfizer Oncology

[Credits >](#)



You can reach these webcasts by using this link: <http://www.wabipacademy.com/webcast/>

## Links

<a href="http://www.bronchology.com">www.bronchology.com</a>	Home of the Journal of Bronchology	<a href="http://www.chestnet.org">www.chestnet.org</a>	Interventional Chest/Diagnostic Procedures (IC/DP) NetWork
<a href="http://www.bronchoscopy.org">www.bronchoscopy.org</a>	International educational website for bronchoscopy training with u-tube and facebook interfaces, numerous teaching videos, and step by step testing and assessment tools	<a href="http://www.thoracic.org">www.thoracic.org</a>	American Thoracic Society
<a href="http://www.aabronchology.org">www.aabronchology.org</a>	American Association for Bronchology and Interventional Pulmonology (AABIP)	<a href="http://www.ctsnet.org">www.ctsnet.org</a>	The leading online resource of educational and scientific research information for cardiothoracic surgeons.
<a href="http://www.eabip.org">www.eabip.org</a>	European Association for Bronchology and Interventional Pulmonology	<a href="http://www.jrs.or.jp">www.jrs.or.jp</a>	The Japanese Respiratory Society
		<a href="http://sites.google.com/site/asendoscopiarespiratoria/">sites.google.com/site/asendoscopiarespiratoria/</a>	Asociación Sudamericana de Endoscopia Respiratoria

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