

"BREATHE"

MR immersive experience on prematurity - premature birth.

Based on personal experience and content already filmed in real time in 360 degrees.

Mixed Reality immersive experience -CGI mix with real 360 footage.

By Michaël Kolchesky

**The journey of a couple faced with the sudden birth
of their twin sons, three months premature.**

TEASER

<https://youtu.be/v0RvIDFrhSw>



BREATHE | Respirometer

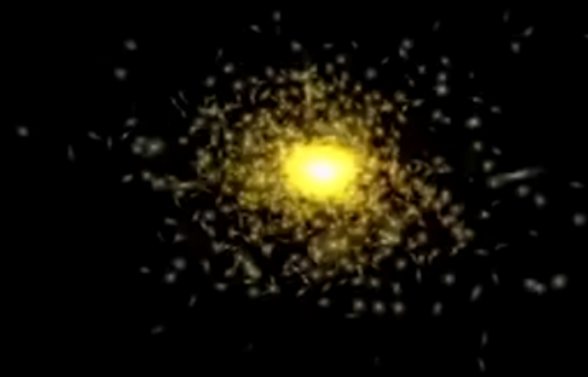
10 -15 minutes mixed reality immersive experience.

Versions in EN + FR



Option: Possibility of two chapters as interactive tree menu :

- **First chapter- Hospitalization the end is the tunnel of light-getting out after 3.5 months**
- **Second chapter: Having premature babies at home after months of hospitalization**



Pitch

This 360° mixed reality documentary film tells the story of a couple faced with the extremely premature birth of their twin sons.

The director - Michael Kolchesky a veteran creator specializing in 360 photography, documented moments of the life she shared with her partner and the father of her children, during the three and a half months that their twin sons were in intensive care hospitalization, after their birth at 27 weeks of gestation.

The documentation continues to this day as they celebrate three years.

Facts

Preterm is defined as babies born alive before 37 weeks of pregnancy are completed.

There are sub-categories of preterm birth, based on gestational age:

- extremely preterm (less than 28 weeks)
- very preterm (28 to 32 weeks)
- moderate to late preterm (32 to 37 weeks).

An estimated 15 million babies are born too early every year worldwide.

That is more than 1 in 10 babies. Approximately 1 million children die each year due to complications of preterm birth. Many survivors face a lifetime of disability, including learning disabilities and visual and hearing problems.

In France, approximately 60,000 babies (8%) are born prematurely each year, or one every 9 minutes. Among them, 5% are very premature babies (between 24 and 28 weeks) or 3000 children. **Of these 3000 children only 2100 will survive** and only 1500 will survive without sequela,

Because the birth takes place prematurely, and before the complete development of the systems in the baby's body, especially the immune system, the premature is more sensitive to diseases and health risks, for example:

Cerebral palsy, problems with the respiratory system, digestive problems, mental retardation, vision problems (such as, for example, retinopathy of prematurity) and hearing problems, as well as jaundice and various infections.

Globally, prematurity is the leading cause of death in children under the age of 5 years.

Although several factors are known that can lead to premature birth, the causes of almost half of the premature births are unknown.

Following the great progress in understanding the problems of premature babies such as With technological development, the percentage of premature deaths has decreased significantly.

However, the percentage of premature births is increasing.

Inequalities in survival rates around the world are stark. In low-income settings, half of the babies born at or below 32 weeks (2 months early) die due to a lack of feasible, cost-effective care such as warmth, breastfeeding support and basic care for infections and breathing difficulties. In high-income countries, almost all these babies survive. Suboptimal use of technology in middle-income settings is causing an increased burden of disability among preterm babies who survive the neonatal period.

Note

This project is unique in that most of the filming has already been done and was done in real-time, three years ago during the actual events of my life. Though originally, I had no intention to make a film from it, a year ago when I looked at these films I made during that time again, I realized that this story and those images might be very useful for others as they are very rare in very intimate situations that could not or very hard to be produced otherwise.

This project is intended to create an experience that engages the viewer's emotions and compels them to seek to understand the subject from a new perspective.

Today, most people still don't know much about premature birth and its long-term consequences for the families involved.

These consequences include necessary hypervigilance against infection, years of follow-up visits to specialists, and many psychological and psychosocial disturbances to the preemies and parents alike.



WHO IS THIS PROJECT FOR / AUDIENCE

This experience is intended to be used for the sensitization of the prematurity theme: Medical staff, education, government offices and the public who are interested in the subject.

The project is intended to be used by the large associations for premature and parents support, to create awareness and to help with the actions for Zero Separation within the global hospital system, hoping for the government's support.

“BREATHE” won funding from Keren Makor with an amount of 100K (Shekel) supporting the development and production of this XR project.

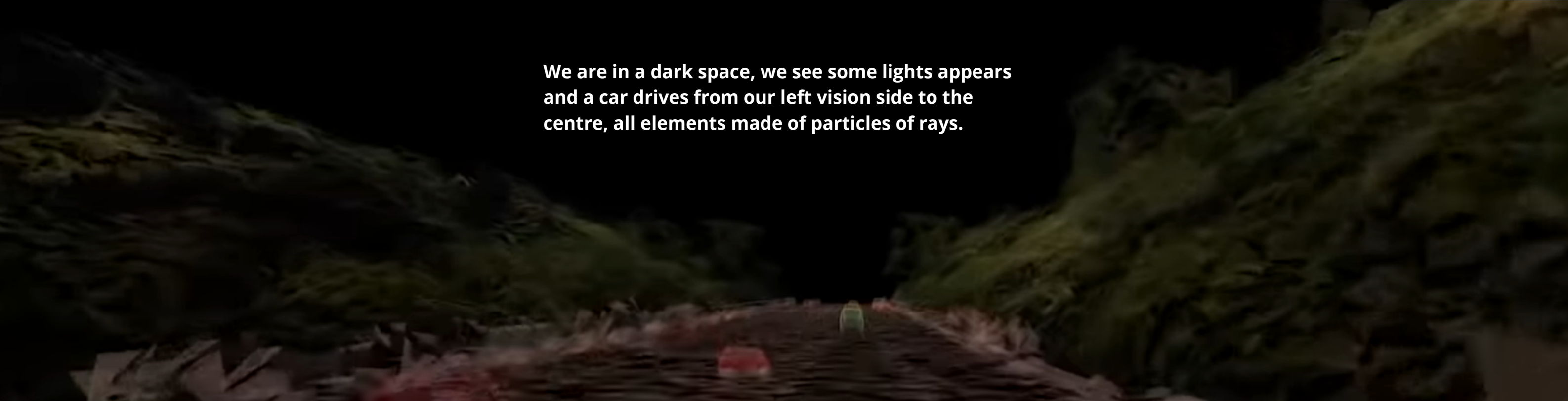


Opening - the first part is CGI with voice-over and spatial sound

It is a dark night outside of Paris... a young couple rushes by car to the hospital. The woman is clearly in pain. It is a scene we have all seen many times in movies, on the news, and even in our own lives. New life is on its way... but the pained expressions and sounds coming from this couple indicate that this is going to be very different from the story of childbirth that most of us are familiar with.

"Faster, faster! Something's wrong!" The woman moans and holds her stomach, urging her partner"

"!Breathe!" says the man to his wife. "Breathe"

A dark, abstract CGI scene. The background is a dark, textured surface with some greenish-yellow highlights. In the center, there is a small, glowing, multi-colored sphere (red, green, blue) that appears to be moving or pulsating. The overall atmosphere is mysterious and futuristic.

We are in a dark space, we see some lights appears and a car drives from our left vision side to the centre, all elements made of particles of rays.

Sound of an ER. Feet move. Monitors BEEP. CRIES. MOANS.

We hear the door of the car slam, and we see the lights of an emergency hospital, the women cry with pain, and the nurse tries to calm the woman down,

“ Let us check you monitor the sound of the heartbeat of the babies.

“ What’s going on, is all ok?” we notice more and more doctors around us (all in a silhouette of light particulars)

Doctor: “ Dilated to 2 cm. Breathe ”

Damien: “ What does that mean?”

Michaela: “ what?” they can not get out now, it's too early! That can not be true!
Please make something, so it will stop, I'm only in my 27 weeks!

Doctor: “ we will give you some fluids to try to postpone the birth we go to the operation room just in case

Michaela: “ ow, no! The water comes out! No! That can be real! No! don’t get out now!”

Doctor: “ breathe ” deep slow breathe ”

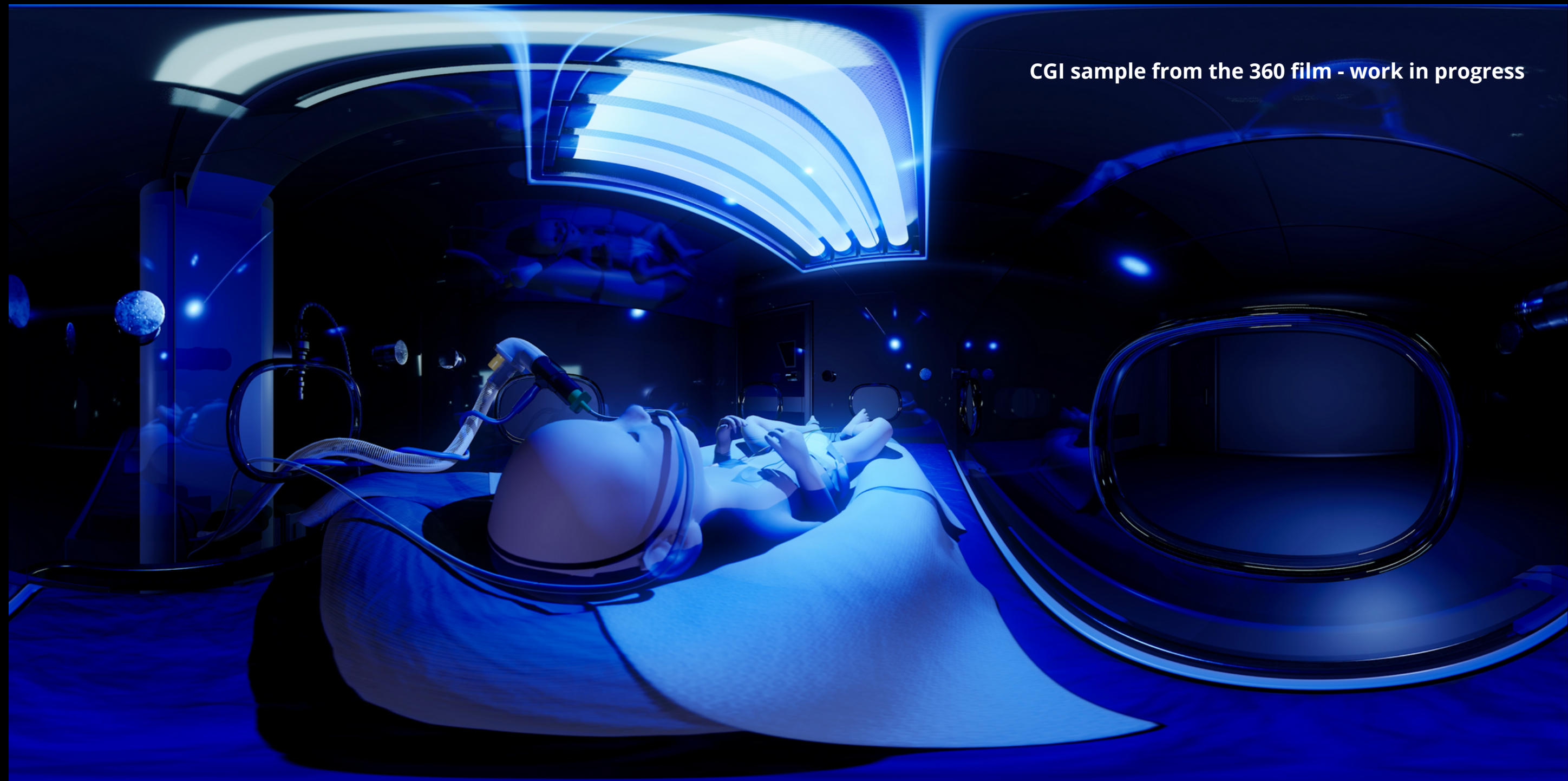
CGI

The CGI images will be used as full immersion POV of the baby inside the womb and follow the dramatic events of the premature birth - the rupture of the Umbilical cord that will be cut off quickly and be transformed into oxygen intubation.



Then, you will find yourself in the POV inside the incubator, and you are alone in this hostile and noisy world, a voice-over of your parents that are also finding themselves alone in other spaces calling you, asking where you are.

There will be the use of light particles CGI to add to animate the baby's conditions when their breath or heartbeat will slow down, so the light will fade as well in synchronization.



“ Nothing could have prepared us ” ...

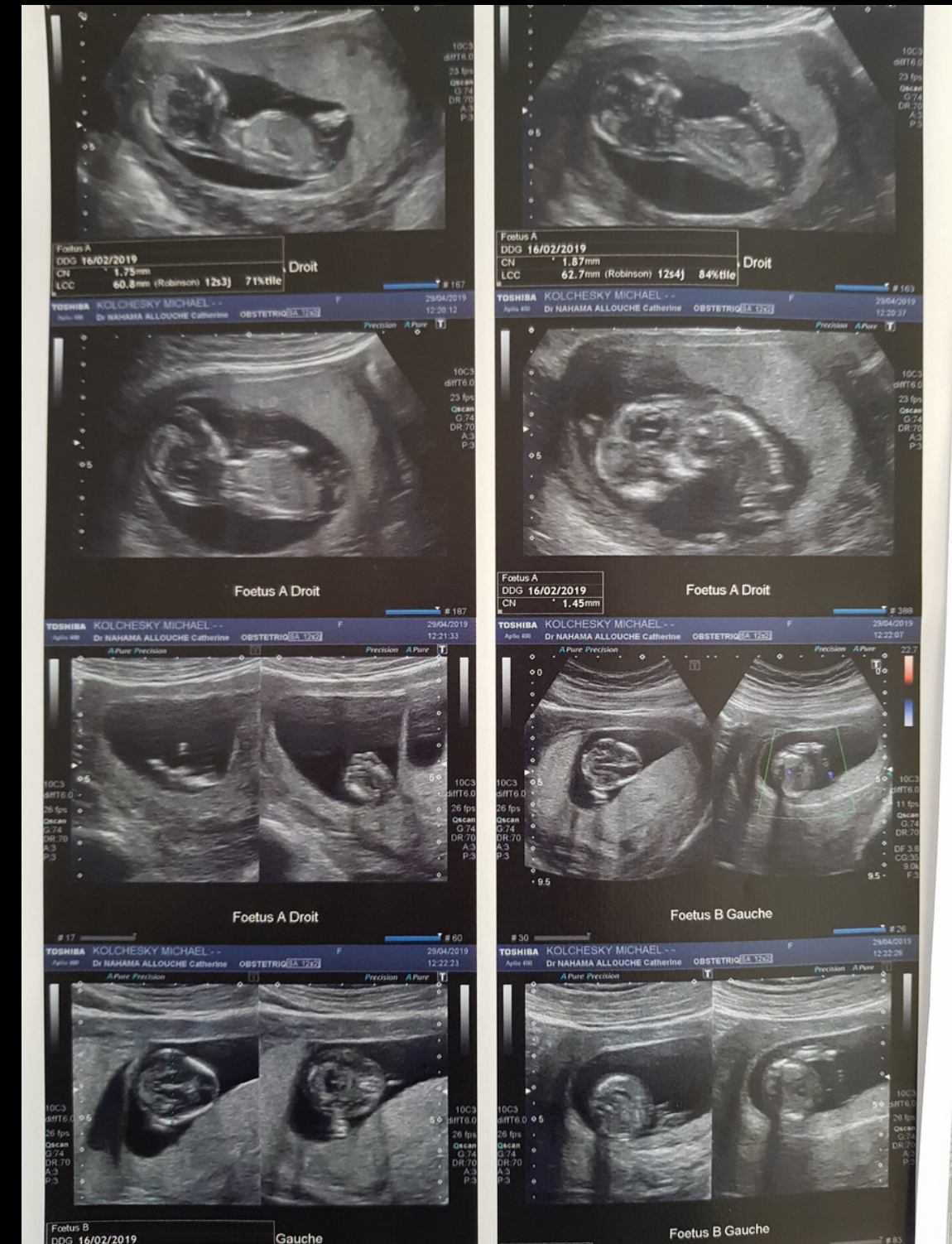


Photo from the First day, seeing Nathanael in his shared room at the Neonatal resuscitation, his twin brother, Maxime was treated in another room, separated.



We had to choose their names very quickly for medical registrations and reports

Maxime - 1170g - 35 cm



Nathanaël - 1030g - 35cm



**Born at 27 weeks + 3 days
2019**

First day view of my premature babies intubated and plug into the machines, inside an incubator.

Fade to the RAW 360 images that will be treated with VFX filters to adapt the 360 videos to the CGI. Masking the hospital details and stuff for any privacy terms.





We move to the Spectator's POV, the reality in the hospital, Spatial sound of machines noises, we will use the hospital machines' sound to create and follow the events, putting us in suspense about those dramatic events.

Second part: NEONATAL UNIT

The daily routine in the hospital.

We move to the spectator POV, the real 360 footage that will be treated with VFX effects



The light at the end of the tunnel - a new chapter begins After 3.5 months of hospitalization.

Final Chapter 1: Hope - getting out of the hospital.

Spectator POV, the real 360 footage that will be treated with VFX effects

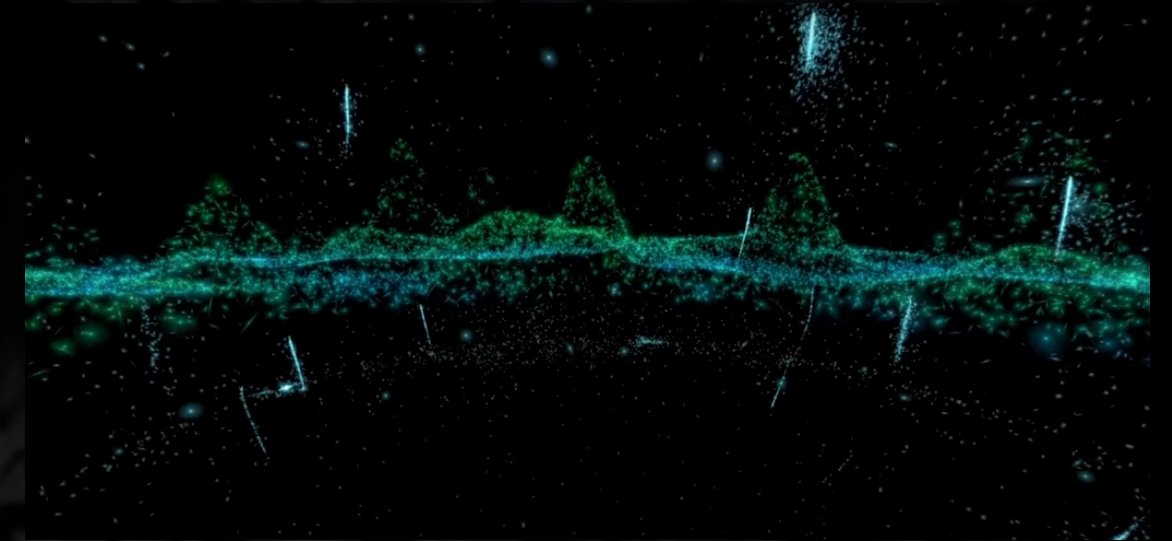


“ The boys are doing well now, but there are no certainties.
We still don't know if they will have normal lives.
We are taking this one step at a time. Every day since they were born,
I have to remind myself to breathe, Breathe. ”

A documentary VR 360 film combined with CGI

- **CGI**
- **Voice over (FR/EN)**
- **Spatial sound**
- **360 videos**
- **VFX filters**
- **AI Tools**

The idea is to combine CGI with the 360 films that have already been shot in the hospital and outside and to process the already filmed material with layers of VFX filters + AI tools.



screenshots from the CGI style of:
On The Morning You Wake (To the End of the World) | ARTE

Spatial sound 360

- *Voice over FR/EN :*
Dad, mom, doctor and nurse
- Sound design for CGI events
- Hospital machine spatial sounds
- Getting out of hospital - mix sound of camera
- Spatial sound mix

This VR/MR 360 film, when finished, could be integrated into the VR for impact international channels :

<https://unvr.sdgactioncampaign.org/get-involved/>

<https://vr4impact.com/>

https://www.linkedin.com/pulse/impact-vr-health-wellness-tesseract-imaging/?trk=organization-update-content_share-article


This future VR/MR 360 film could raise awareness of the associations that help and support this course, like:

- SOS Pérma France
- Lehva - The association for premature infants in Israel לה"ב
- French Human milk bank association (FHMBA)
- Association des Lactariums de France (ADLF)

And others more, this subject touches many and will be in various languages (EN/FR) and could promote each country association for premature babies and parent support.

This VR/MR film will be the future of the international day of prematurity - to raise awareness and will be used for hospital staff and government funding to promote zero separation.

VR for Impact

 VR for Impact



SOS Préma • Association d'aide aux familles d'enfant prématuré

SOS Préma est la première association Française d'aide et soutien aux familles d'enfant prématuré.

 SOS Préma /

Those are our heroes, the power of life, our lights
This film is dedicated to all the babies that could not make it and their families.



THE TEAM

**Author, creator, director
and Executive producer**



Michaël Kolchesky

(France / Israel)

Graduated in photography and visual arts from Musrara Nagar Academy in Jerusalem (2005-2007) and from the Art Institute of Atlanta, USA (2003), Michael Kolchesky quickly became passionate about the new technologies of virtual reality and is one of the pioneers in this field.

She has been working as a technical expert in 360° imaging for more than 13 (since 2009) years and had been given conferences and masterclasses at international events. She has contributed to more than 180 VR/XR/MR projects as a technical consultant, 360 camera operator and post-production expert specific to these new mediums.

She has worked for brands such as BMW, Cartier, EHL, Jaeger Lecultre, Air France, Lancôme... and helped to create immersive experiences for Museums such as The Great War Museum In Péronne, France , she worked with some of the top directors as Marc Caro, Luc Serrano, Vincent Burgevin, Mathias Chelebourg and help some of the top French start-ups to develop their VR 360 imagery departments. She created 2009-2010 one of the first interactive exhibitions "Las fiestas de Santa Tecla" for the City hall of Tarragona, Cataluña.

Michael Kolchesky was the Vice President of the IVRPA (International Virtual reality Professional Association) from 2017 to 2019 and help to organize international conferences at Vienna (2017) Tokyo (2018) and Belfast (2019).

She is the founder of Visual Solutions 360 and lives in France, Île-de-France since 2013. Michaël speaks French, English, Spanish and Hebrew.

[Website](#)

[LinkedIn](#)

[Instagram](#)

[Facebook](#)



Co-Producer (Israel)

Daizy Films Production Company

DAIZY FILMS is a Tel Aviv based independent film and television production company, founded by Tal Moskovich and Matan Glazovsky in 2021.

Daizy films focused on creating and producing original content for all platforms, targeted both Israeli and International markets.



Co-Writer/Screenwriter - (LUX/US)

Michelle M. Leddon

Trained in traditional screenwriting and film, Michelle's recent work is focused on projects that confront technology and the stories, we tell ourselves about progress.

Recently, she was the creative director, producer and writer on the project 'Privy To,' which was an official selection at CPH:DOX 2021 Inter: Active.

She also works on a variety of children's and educational projects.

In 2020, she received the Luxembourg Aides aux Auteurs grant for a children's series.

Michelle lives and works in Berlin.



CGI artist - (Israel / Uruguay)

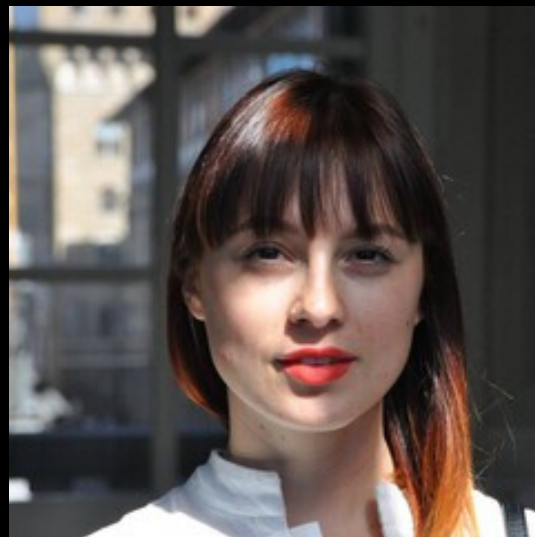
Santiago Kapelius

Independent 3d technical artist, designer and animator with more than a decade of experience.

Passionate about fine and digital visual arts.

Active in 2 main areas: 3D animation for various industries and the Development of interactive and cinematic XR experiences.

Studied Film and TV at Tel Aviv University, Communication Science at ORT College,



CGI artist - (Israel / LA)

Anastasia Tamir

3D Environment Artist & real-life Architect.

Her work focuses on creating interactive environments- METAVERSE for NFT ART & collectables from different fields (CG art, Fashion, Sculpture); cinematic trailers; ArchViz, and architectural design.

specialize in:

Architectural Visualizations | 3D modelling | Unreal Engine |

| Blueprints | 3D Printing | VR\AR | UI | Cinematics |



Editing assistant - (Israel)

Sigi Golan

A filmmaker and a video editor based in Jerusalem, Israel. A graduate of the Sam Spiegel Film and Television School.

The editor of the 360 VR experience "Once Upon A Sea", which took part in the Venice Film Festival, SXSW and won the Lumiere Award.

Worked in the post-production team of the 360 VR experience "The Holy City", which participated in Cannes XR and was shown in various museums around the world.

Wrote and directed two short narrative films which were screened at festivals around the world.

Currently developing a feature film and two short films that were funded by various local funds.



Immersive sound designer- (France)

Christian Esteves-Vallée

Sound engineer with more than 20 years of experience in the field. Specialized in virtual reality for 7 years, he began his studies in audiovisuals and quickly developed a passion for both aspects of the industry: image and sound.

In VR, he has acquired expertise in image and spatialized sound. For him, sound and image are inseparable, and even more so in VR productions.

Immersive sound is an indispensable element in cinematic VR storytelling. For optimal immersion, sound creation and spatialized mixing must be in synergy. According to him, sound in VR is even more important than in traditional non-immersive creations. He sees immersive sound as an endless playground for experimenting with new ideas and innovative approaches to storytelling.