

berckwerk

PRESS BOOK - FESTIVAL

HÖHENRAUSCH

THE DEVELOPMENT OF HIGH-ALTITUDE MEDICINE



A documentary by David Pichler

Germany 2022 / Length 73min

CONTENT

| | |
|------------------------------|----|
| TECHNICAL DATA | 3 |
| NOMINATIONS / AWARDS | 4 |
| FESTIVALS / CROSS EVALUATION | 5 |
| CREW (OVERVIEW) | 6 |
| BACKGROUND INFORMATION | 7 |
| CONTENT | 8 |
| PROTAGONISTS | 10 |
| DAVID PICHLER - DIRECTOR | 14 |
| CREW | 16 |
| CONTACT | 19 |

TECHNICAL DATA

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|---------------------|---|
| LANGUAGE: | GERMAN |
| SUBTITLE: | ENGLISH |
| FILM DURATION: | 73 min |
| FORMAT: | Colour - 16 :9 – ProRes 4.2.2 HQ - Stereo |
| GENRE: | DOCUMENTARY |
| PRODUCTION COUNTRY: | GERMANY |
| PRODUCTION YEAR: | 2022 |

AWARDS

- **19. Internationales Bergfilm Festival Tegernsee**
Tegernsee, Germany
October 21, 2022

Awarded as **Best Mountain Film 2022** in the category "Erlebnisraum Berg"
Prize of the German Alpine Association (DAV)

NOMINATIONS

- **Bozen Filmfestival Bolzano**
Bozen, Italy
April 4, 2022

Nominated for the Special Award "Dolomites UNESCO World Heritage Site"

FESTIVALS

- **Kathmandu International Mountain Film Festival /KIMFF**
Kathmandu
Nepal
December, 2022
- **Mountain Film Meeting 2022 – Official Selection**
Zakopane
Poland
December, 2022
- **Dutch Mountain-Festival #12**
Herleen & Aachen
Netherlands & Germany
November 2, 2022
- **Mountainfilm International Filmfestival Graz**
Graz
Austria
November 11, 2022
- **EHO Mountain Film Festival**
Skopje
Republic of Macedonia
September 9, 2022
- **Alpenflimmern**
Garmisch-Partenkirchen
Germany
July 22, 2022

CROSS EVALUATION

- **JoVE Film Your Research Contest 2017, Journal of Visualized Experiments**
Peer Reviewed Scientific Video Journal - Methods and Protocols
“Into thin air” with Prof. Marc- Moritz Berger
Cross evaluation of the Film, 2 Minutes
Online
Cambridge (HQ)/USA, London/UK, Melbourne/Australia, Mumbai/India
September 2017, **3rd prize of the jury**

CREW (OVERVIEW)

DIRECTOR: DAVID PICHLER

SCREENPLAY: DAVID PICHLER & NICOLAI NIESSEN

CAMERA: TOBIAS TEMPEL

EDIT: MATTHIAS OBERMEIER, DAVID PICHLER, NICOLAI NIESSEN

SOUND: MATTHIAS OBERMEIER

MUSIC: CHRISTIAN „TAISON“ HEISS

PRODUCTION: NICOLAI NIESSEN

BACKGROUND INFORMATION

Between May 11 and May 24, 2016, 836 people attempted to climb to the summit of Mount Everest. 638 of them achieved their goal of standing on the highest mountain in the world.

The spell is unbroken. In recent years, a veritable record hunt has broken out in high-altitude mountaineering. The summit aspirants are getting younger, older, faster, are blind or suffer from physical disabilities. Mount Everest and the other 13 eight-thousanders are a trophy. The list of records is long.

On Mount Everest alone, an annual average of about seven people lost their lives between 2000 and 2016, and an estimated total of 282 people since records began in 1924 until 2015. On K2, the world's second highest mountain, 82 people died in fatal accidents last year alone, accounting for one in four climbers attempting to scale the summit. Annapurna is even deadlier, with 71 deaths out of 255 summit aspirants in 2016.

The most common causes of death are falls, frostbite, exhaustion, avalanches and altitude sickness.

The clear majority of climbers manage the ascent only with the help of supplementary bottled oxygen.

Before the first unaided ascent of Everest by Reinhold Messner and Peter Habeler in 1978, an ascent was reserved only for certified professional mountaineers. Until then, an ascent without the aid of artificial oxygen was considered almost impossible. The generally accepted thesis was that prolonged exposure to extreme altitude and thus to oxygen-poor air would result in severe brain damage.

The physician and mountaineer Oswald Oelz was a consulting expedition doctor at the time and believed from the beginning that Messner and Habeler would have a successful expedition. He was to be proved right, and a turnaround and rethinking took place in the entire field of high alpinism and, correspondingly, in medical research.

A specialized group of medical scientists from all over the world is engaged in researching the effects of hypoxia on the human body under the extreme condition of oxygen deficiency. In elaborate studies they investigate the physiological processes that take place in the organism and how it adapts to extreme conditions.

BRIEF CONTENT

A scientific, adventure documentary about the history and development of alpine and high-altitude medicine around the Capanna Regina Margherita in Italy's Monte Rosa massif, the highest structure in Europe.

Successful high-altitude mountaineer Gerlinde Kaltenbrunner provides a personal insight into her experiences with oxygen depletion at high altitudes, while medical professors Oswald Oelz and Peter Bärtsch share many anecdotes about their research findings over the past 40 years in dealing with altitude sickness. Together with 51 volunteers, the research team of the Salzburg Mountain Medicine Research Group led by Professor Marc Berger is conducting a current study at the Margherita Hut.

The result is an exciting, informative and scientific film that reports on the dangers, development mechanisms and therapeutic strategies of altitude sickness.

CONTENT

FASCINATION MOUNTAINS. BREATHLESS MOUNTAIN WORLDS. DIZZYING HEIGHTS. HEADACHE MOUNTAINS.

Man has always attempted the impossible, and since the oxygen-free ascent of Mount Everest on May 8, 1978, the spell seems to have been broken in the alpine race for ever more records.

But is man made for this inhospitable world? What happens in the organism in the face of these extreme conditions? What are the current research questions? How did the Margherita cocktail come about? And what distinguished Reinhold Messner physiologically from all the others who failed or left their lives at the highest point on earth?

To answer many of these questions, the Capanna Regina Margherita (Margherita Hut) was built in the Monte Rosa region of Italy as early as 1893 at 4554m above sea level for the purpose of altitude physiological research. Since then, the hut has been the center of European high-altitude medicine and serves as the starting point of our documentary film.

The film accompanies the research team led by high-altitude physician Prof. Dr. med. Marc Moritz Berger to the Margherita Hut, where he conducts a study on the pathophysiology of acute mountain sickness with 52 subjects in a disease provocation maneuver.

Medical professors Oswald Oelz - himself a successful mountaineer and former mountain partner of Reinhold Messner - and Peter Bärtsch, an internationally renowned high-altitude physician, have together revitalized research activities at the Margherita Hut since the 1980s and have since had a significant international impact on research into high-altitude illness.

Both report in many anecdotes about their research at the hut over the past 40 years and vividly present the dangers and the therapies they have developed for altitude sickness.

Gerlinde Kaltenbrunner is one of the most successful high-altitude mountaineers of the world and the first woman to have climbed all 14 eight-thousanders without supplementary oxygen. She describes her experiences in dealing with the low-oxygen atmosphere at high altitudes and tells how she was influenced by the research work at the Margherita Hut of Oswald Oelz and Peter Bartsch.

In addition, spectacular mountain images, helicopter flights and landscape shots show the fascinating, often rugged and hostile world of high alpinism in contrast to the highly specialized environment of elaborate medical and physiological research.

On the one hand, the result is a scientific, technically sound film that provides information about the medical aspects of acute mountain sickness, high-altitude pulmonary and cerebral edema and current research, and on the other hand, a visually captivating, narratively exciting mountain film.

Unbridled will and physical ruthlessness meets pipette, data analysis and field research.



Prof. Dr. med. PETER BÄRTSCH is Swiss and now lives again in Zurich. He was professor for sports medicine and head of the department of internal medicine/sports medicine at the Medical University Hospital in Heidelberg until 2013.

His scientific focus is on the pathophysiology, therapy and prevention of acute mountain sickness and blood coagulation in hypoxia and under physical stress. He participated in a number of international committees. Among others, he was president of the International Society of Mountain Medicine in 1997 - 2000.

His scientific work has been highly decorated published. Together with Oswald Oelz, he revitalized the medical research work at the Margherita Hut. Since then, he has led a large number of studies on the Signalkuppe and was, among other things, instrumental in the development of the 'Margherita Cocktail'. To this day, Peter Bärtsch is internationally regarded as a renowned expert on acute mountain sickness, high-altitude lung and high-altitude brain edema. In February 2017, he was honored for his life's work during the International Hypoxia Symposium in Lake Louis, Canada.

For many years, Peter Bärtsch has organized widely attended high-altitude medical specialty training courses for physicians at Susten Pass in Switzerland.

Peter Bärtsch is a proven supporter of our project and also a scientific advisor. He was available to us as a protagonist in extensive interviews with many anecdotes.



Prof. Dr. med. OSWALD OELZ developed his love for the mountains at an early age, later for medicine, and eventually made a great career as an extreme mountaineer, internist and high-altitude physician.

He was chief physician at the Trimelispital in Zurich until 2006 and conducted research, including self-experiments, in the field of altitude sickness and high-altitude lung and brain edema. As an expedition physician, he was involved in the first oxygen-free ascent of Mount Everest by Reinhold Messner and Peter Habeler, and subsequently examined the most successful mountaineers of his time in medical studies with regard to their physiological performance. His medical work in this regard has been published in the Lancet, among other journals.

Oswald is himself a renowned high-altitude mountaineer. For example, he has been involved in numerous expeditions to the Himalayas and is the third person in the world to have successfully climbed the Seven Summits.

Together with Professor Peter Bärtsch and Professor Heimo Mairbäurl, he revitalized high-altitude medical research at the Margherita Hut. Today he is a much sought-after lecturer and successful book author.

Oswald lives with his wife and parrots in Switzerland on a farm and raises sheep. We were able to visit him there and have an exciting conversation with him about his mountaineering career and medical research.



Prof. Dr. med. MARC BERGER studied human medicine at the University of Heidelberg.

For many years, he was a senior physician and deputy director of the University Clinic for Anesthesiology in Salzburg, where he was appointed Associate Professor of Anesthesiology. Currently, he is a managing, senior physician in the surgical center and external clinics of the University Hospital Essen. He is also head of clinical research.

He is the director and scientific head of the Salzburg Mountain Medicine Research Group (SMMRG) and, with his research group, conducted the 2016 study on Capanna Regina Margherita to investigate the development of acute mountain sickness.

The results of the study, documented in the film, were presented as a hot topic at the international congress of 'Hypoxia' in Lake Louis, Canada, among others. Further high-profile publications in medical journals followed.

Marc Berger is actively working in the field of altitude medical research and has led further studies at the Margherita Hut and the research station at the Jungfrauoch, among others.

He is a proven supporter of our documentary film efforts and is also available to us as a scientific advisor for technical questions.

We were allowed to accompany Marc Berger throughout the entire process of the study and gained profound insights into the personal and professional challenges that medical research in extreme situations entails.



GERLINDE KALTENBRUNNER is one of the most successful high-altitude mountaineers in the world.

She is the third woman to have climbed all 14 eight-thousanders and the first to have done so without the aid of additional bottled oxygen.

Before her professional career, Gerlinde worked as a nurse.

We met the Austrian at Lake Attersee and talked to her in detail about her passion for mountaineering. In doing so, she gives us very personal and profound insights into her preparations for her expeditions and how she deals with the danger on the mountain and the confrontation with hypoxia.

She has often been in critical situations herself and has cared for many mountain friends with altitude sickness.

For Gerlinde Kaltenbrunner, successful mountain expeditions have something to do with mindfulness in dealing with oneself. For herself, she has found that the temperature at which she feels most comfortable is minus 10° Celsius.



DAVID PICHLER

Born in Merano/South Tyrol/Italy, David Pichler graduated from the Film Academy FAMU - ACADEMY OF PERFORMING ARTS in Prague with a comprehensive diploma in directing, screenwriting and producing under Miroslav Mandic and Tom Gregor and editing under Ivana Davidová.

This was followed by DIRECTING ACTORS studies at the LONDON FILM SCHOOL with Udayan Prasad.

After his career in film, television and music video production as a script supervisor, assistant director, recording and production manager, David Pichler now works as a freelance director, screenwriter, creative producer and editor primarily in the field of advertising and image film.

David Pichler directed and has been a driving force and idea generator as well as author since the first idea for the altitude medical documentary.

FILMOGRAPHY (selection)

FS – SÜDTIROL AMORE MIO

Doku - 2016 - ... (Work In Progress)

Director, Writer, Producer, Cinematographer, Editor, Animations...

Production: dokp

GEMEINSAM SIND WIR BRIXEN

Commercial - 2020

Director, Writer, Producer

Production: dp productions

MASTERTENT

9 Productfilms - 2018

Director, Writer, Producer

Production: dp productions

MAN - TOP USED

Commercial - 2018

Director, Writer, Producer

Production: MMK

MAN FINANCIAL SERVICES – KLIMAEFFIZIENTE MIETFAHRGELEGENHEIT

Commercial - 2015

Director, Writer, Producer

Production: MMK

AGAINST AT

Commercial/Social Spot - 2008

Director, Writer, Producer, CoEditor

Production: a family P production

2ND HAND

shortfilm - 2007

Director, Writer, Producer, Editor, Actor

Production: Yellow Legend Film (Seoul)

BIRTHDAY

shortfilm - 2004 (redux 2012)

Director, Writer, Producer, Editor ...

Production: a family P production

DER KLEINE UNTERSCHIED

stop motion animation - 1998

Director, Writer, Producer, Editor



NICOLAI NIESSEN is a medical doctor and completed his specialist training in 'Alpine and High Altitude Medicine' with Prof. em. Peter Bärtsch in 2014.

Before his studies, the native of Upper Bavaria worked for many years in Berlin as a filmmaker in various departments of film production - primarily in the documentary field.

In 2014 he realized the mountain art loop 'above the cloud' for an advertising campaign and as a result he found himself infected with the film virus again.

Thus, from his passion for film, photography, mountain and medicine - as well as the desire for a sound audiovisual knowledge transfer - the project 'berckwerk' was launched and subsequently realized the "expedition enterprise for flatlander" on his own initiative.

Since 2016 Nicolai is the driving force and the head of the documentary film project 'Capanna Regina Margherita 4554 s.l.m.' (Working title) or 'HÖHENRAUSCH – the development of high-altitude medicine'.



TOBIAS TEMPEL is a freelance cameraman living in Munich.

He studied documentary film at the HFF Munich. He is interested in an authentic approach and a tangible closeness to the protagonists. His films have already taken him to Somali pirates, to a poetess in otherwise closed Saudi Arabia, into the locker room of failing basketball players, and time and again into the souls of fascinating people.

His camerawork received a lot of praise in "Stark! Ibrahim and Jeremiah", the Grimme Audience Award 2017, "Lieber Leben - Tobis neues Herz" the BVHK Journalist Award 2016 and "Corinnes Geheimnis" the Bavarian Television Award 2016.

His work "Der Kapitän und sein Pirat", from 2012, received many awards. The 88-minute film received awards at the 55th Documentary Film Festival Leipzig 2012 and at the Documentary Film Festival Max Ophüls. In Munich, the production won the FFF Förderpreis at DOK.Fest and in Brussels the Special Jury Prize at the International Documentary Film Festival. It also won in the 'Best Documentary' category at the International Documentary Film Festival Zagreb and received an award at the International Documentary Film Festival CEBU 2013.

"Phoenix in the Ashes", from 2011 was best documentary at the Slamdance Film Festival in the USA 2012 and received the regional award at the "Blicke Film Festival Bochum".

Most recently, his film: "After the Happy End" premiered at Dokfest Munich in 2022.



MATTHIAS OBERMEIER grew up in the foothills of the Alps near Lake Starnberg, yet his passion for the mountains was only brought to life by our documentary film project.

The stay at the Margherita Hut was Matthias' first mountain experience at high altitudes, and in preparation for the shoot he subjected himself to a rigorous personal training schedule.

Matthias Obermeier is the generalist and sophisticated technician in the team. After studying humanities in Munich, he trained at the Bavarian Academy for Film and Television. Today he works as an independent filmmaker.

In addition to countless TV productions, he has been involved in a number of documentaries. Thus, he already participated in the documentary "Endstation Seeshaupt - Der Todeszug von 1945" in 2010 and showed himself responsible for sound and 2nd unit camera in "Zeug & Werk - Handwerker geschichten vom Starnberger See" in 2011.

In 2015 he realized as a cameraman and editor "Tunnelblick" a 45-minute unusual documentary about art and in 2017 his camera work "Fahr ma obi am Wasser", a "homage to the archaic craft of the Isar rafters, known since the Middle Ages" ran in Bavarian cinemas.

Matthias has been part of the team since the very beginning of the production and is significantly responsible for the editing as well as the sound.

CONTACT

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