# David Barlow Visual effects



Cinematographer
Director of Photography
Visual Effects Director

David is a scientist by training but filming is his first love, particularly visual effects. He likes to simulate reality rather than fake it. So when visual effects need to illustrate scientific, medical, or physical phenomena accurately, he is in his element.

In his long career, David has been a science researcher (he has a Phd in animal locomotion), a director/cameraman, a producer/director (eg: C4's *Equinox*) and a visual effects director. This unusual combination of experience allows him to understand not only the needs of directors but also to direct himself and others as a second unit. However, he is always behind the camera when the shooting starts. Initially, his work was on film in formats from 16mm up to 15perf/65 but he now uses Digital Cinema cameras.

He has been intimately involved with two major Large Format Films. *To the Limit* and *The Human Body. To the Limit* required 15perf/65 shooting whilst on *The Human* 



**Body** both 15perf and 8perf/65 cameras were used.

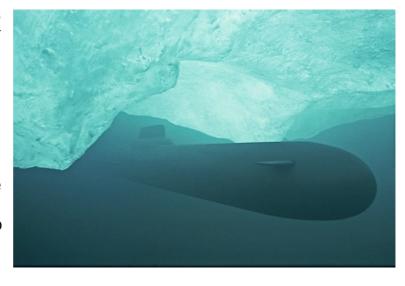
He adapted his experience gained from numerous TV documentaries to film complex interior body sequences. *To the Limit* was the first time anyone had attempted to film with endoscopes and microscopes for the giant IMAX screen. David won the Lennart Nilsson Award for 2003 for his visual effects on *The Human Body*.

The 1998 BBC Human Body series was a ground breaking production and David won two Royal Society Awards for photography and visual effects and was nominated for a BAFTA award.

David has developed many ways to simulate medical and biological processes using real tissues and organs. He is also an expert in microscopic techniques as well as other medical and scientific imaging methods. He has contributed to many TV series shown on

major broadcast networks. Most recently he won an Emmy for his work on *Inside the Living Body* for the National Geographic Channel.

Alongside this work, he has been deeply involved with miniature effects and reconstruction sequences. These often combine a mixture of full sized sets and actors with physical models and cgi to put the camera where the action is; usually in the middle



of some unfolding disaster. The **Storm City** series for Sky Television has given him valuable experience in filming this type of material in 3D. Much of this special effects work has been undertaken with Pioneer Productions making a valuable contribution to their science documentaries.

For the *In the Womb* series with Pioneer productions, David combined specialist photography with special effects techniques to create hitherto unseen images illustrating the world of the unborn. The first series of films, *Life Before Birth* won David an RTS award (2004-2005) for Visual Effects. The experience gained in combining physical models with cgi creates a very powerful tool for recreating life in the womb which has been applied subsequently to several equally successful series.

A more detailed list of the main films and series to which David has been credited as a contributor is below along with some extra personal notes.

### **AWARDS**

**Emmy** Design and Art Direction Inside the Living Body National Geographic 2007

Royal Television Society
Visual Effects/Special Effects
Life Before Birth C4 2005

**Lennart Nilsson Award**Outstanding Photography in Science 2003

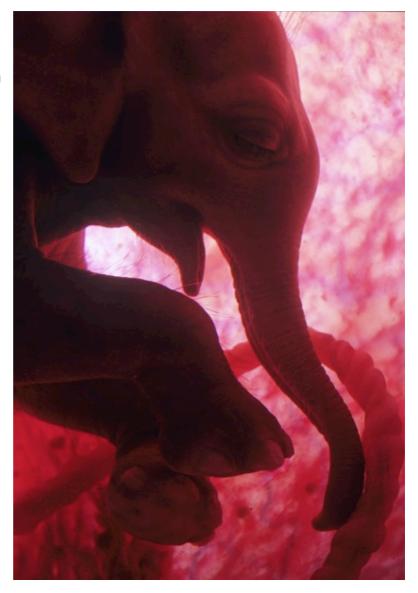
Royal Television Society
Photography
The Human Body BBC 1998

Royal Television Society
Visual Effects
The Human Body BBC 1998

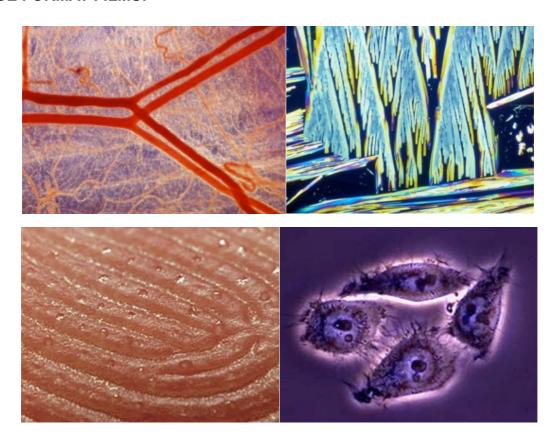
# Websites:

Personal site: www.dbarlow.co.uk

Archive site: www.davidbarlowarchive.com



# **LARGE FORMAT FILMS:**



# To the Limit.

# MacGillivray/Freeman Films

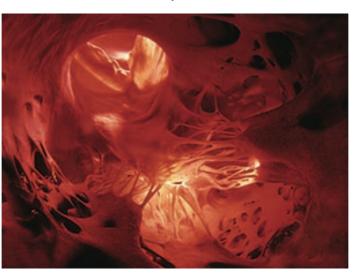
Specialist DoP filming several sequences on IMAX cameras following the inside story within the body. These sequences made up nearly a third of the running time of the film. These complemented live action footage of sports and dance.

This project demanded the most extreme refinement of the photographic techniques developed over previous years to achieve microscopic and endoscopic images capable of being projected onto the IMAX screen.

# The Human Body

# **BBC/Discovery**

Director of
Photography for
film recreating
sequences within
Human Body TV
film format. The
innovations in
simulation
my receiving the
award for
photography in



Specialist
this large format
some of the key
the award winning
series in the large
technical
biological
photography led to
Lennart Nilsson
outstanding
science. in 2003

### IN THE WOMB:





A very successful series of films charting the development and birth of human babies and several animal types. The obvious ethical and practical problems with filming real pregnancies dictated that the interior developmental sequences needed to be created using visual effects. The brief required that the sequences look as real as possible but still allow clarity of view for the audience. The backbone of the filming was accomplished using physical models filmed in my own studio and complemented by computer graphics sequences.

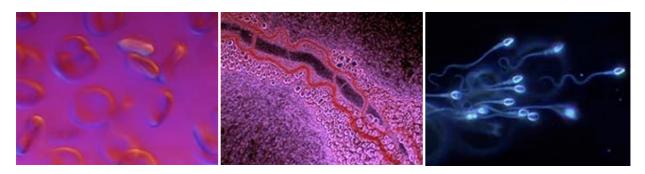
Birth
Miracles of Life
Extraordinary Animals in the Womb
In the Womb: Dogs
In the Womb: Cats
Animals in the Womb
Multiples in the Womb
In the Womb/Life Before Birth

Discovery
TLC
Nat Geo/Channel 4
Nat Geo/Channel 4
Nat Geo/Channel 4
Nat Geo Channel 4
Nat Geo/Channel 4
Nat Geo/Channel 4
Nat Geo/Channel 4





#### **INSIDE THE BODY:**



My career in film and television started in 1983 with Channel 4's Living Body series as the director of specialist photography. It allowed me to consider medical subjects and how to film inside the body without simply filming an operation. I started mixing straight scientific/medical photography with accurate simulation to illustrate otherwise inaccessible events. This creative scientific approach is the hallmark of my approach to visual effects and has led to a distinctive and recognisable style.

For these series and films I wore my physiologist/biologist hat undertaking visual effects sequences as specialist cinematographer and vfx director; using real tissues and organs to recreate the body in action. Other medical and physiological techniques such as microscopy and endoscopy were also used.

The footage created in these films has been reused as archive film many times.

Cradle to Grave (120min)	Nat Geo
Inside the Living Body (100min)	Nat Geo/C4
Truth about Food (6 X 60min)	BBC
Body Snatchers (3 X 60min)	BBC
Teen Species (3 X 60min)	BBC
Superhuman (6 X 60min)	BBC
The Human Body (7 X 60min)	BBC
Body Atlas (26 X 30min)	TLC
The Living Body (26 X 30min)	Channel 4

Nominated for BAFTA (1999) award for work on The Human Body (BBC)

In 2008 winner of an Emmy award for work on the National Geographic version of **Inside** the Living Body.

Nominated for a further Emmy award (2010) for In the Womb: Extreme Animals (Nat Geo)

# **VISUAL EFFECTS**



Extreme Machines V (6 X 50min)	TLC
Extreme Machines IV (12 X 50min)	TLC
Extreme Machines III (12 X 50min)	TLC
Extreme Machines II (12 X 50min)	TLC
Extreme Machines (12 X 50min)	TLC

Visual Effects Director. Physical miniatures and computer graphics were combined to recreate a whole range of experiences from the disaster of a sinking submarine to a trip in space. Extreme machines was in almost continuous production for five years and I became quite an expert at blowing things up.

Universe - Beyond the Millennium	C4/TLC
Mysterious Universe	C4

Two series about the mysteries of the universe. Visual Effects Director. This was mostly a computer graphics exercise but involved creating and filming textures for use within computer generated imagery.

Naked Science II Nat Geo/C4
Naked Science Nat Geo/C4

Illustrating science questions. My role was to create insert sequences to recreate such varied events as an asteroid hitting LA or the Lost world of Atlantis.



Raging PlanetDiscoveryThe Da Vinci ShroudC4/WNETThe Day the Earth was BornC4/WGBHWalking with CavemenBBCVolcano DetectivesChannel 4Blast Off; Stories from the final frontier (90 mins)TLC

Miniature effects and special close up photographic effects. Directing and photographing insert sequences for the main movie as a second unit. Miniature effects and supervising compositing and cgi elements.



Challenger: Countdown to Disaster (100min documentary/drama) Nat Geo/C4

Director of Visual effects. Filming miniature sequences of the unfolding disaster aboard Challenger and directing cgi and compositing. A lot of blue and green screen work

*Krakatoa* (102min documentary/drama)

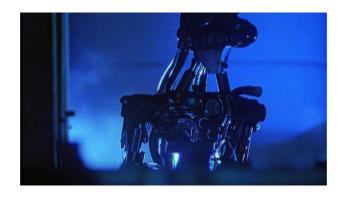
C4/PBS

Director of Visual Effects directing live action effects of ash on location in Indonesia. Also shooting miniature sequences of the tidal wave combined with cgi.

# Reality on the Rocks (4X1hr)

C4

An examination of the nature of physical reality looking at the way scientists have described the fabric of spacetime. Mixing high level VFX sequences with the comedy of Ken Campbell who presented the series. Visual Effects Director.



3D

Storm City 3D (4 X 50min)

Sky TV

Visual effects director and cinematographer. Miniatures and reconstruction sequences using 3D digital cameras. Green and Blue screen effects.

A very challenging series of four programs on the destruction wrought on mankind by the forces of nature. Required me produce a miniature tornado and other miniature effects and direct and photograph sequences of destruction to illustrate the stories of victims of severe weather.



# **DIRECTOR AND PRODUCER**

Early years

**Equinox** (Channel 4 1987-1991)

Produced and Directed shows for this prime time C4 show. I frequently undertook much of my own photography for the shows as well as working with other cameramen.

**Nature's Technology** How moving robots mimic many of nature's own ways of moving and grasping.

**Chaos** The first film attempted to describe Chaos mathematics and the Butterfly effect to a general audience. Winner of many awards including a best picture Royal Television Society award.

The Art of Deception Stealth technology in the military.

**Not In the Stars** Another mathematical film about the science of prediction.

**Faster than a Speeding Bullet** The history and future of supersonic and hypersonic flight.

Superstrings The physics of string theory.

## Wildshots Channel 4

A six part series on practical wildlife photography presented by Chris Packham.

