CANCER: The Emperor of all Maladies - Episode One: Magic Bullets - Credits

Episode 1

A Film by
Barak Goodman

Executive Producer
Ken Burns

Executive Producers
Dalton Delan
David S. Thompson
Pamela Oas Williams
Laura Ziskin

Edited by
Peter R. Livingston, Jr.

Written by
Geoffrey Ward and Ken Burns
Barak Goodman & David Blistein

Directed by
Jack Youngelson and Barak Goodman

EPISODE ONE
Senior Creative Consultant       Ken Burns
Series Producer                  Barak Goodman
Based on the book "The Emperor of All Maladies: A Biography of Cancer" by Siddhartha Mukherjee
Narrator                        Edward Herrmann
Field Producers                 Ali Sargent
                                and
                                Lindsey Megru
                                Emily Singer Chapman
                                David Cieri
Music Composed By               Molly Schwartz Studio
Graphics and Animation          Jen Glabus
                                Dana Schechter
                                Jason Conradt
                                Garry Waller
                                Sean Donnelly
                                Ray Lewis
Daniel Kamhaji
Senior Scientific Advisors
Dr. Harold Varmus
Dr. Robert Weinberg

Holly Siegel
Associate Producers
Tom Denison
Nora Ballard

Robert Hanna
Directors of Photography
Stephen McCarthy
Sam Russell

Stef Gordon
Line Producer
Stephen Altobello
Post Production Supervisor
Deborah Dickson
Additional Directing
Karen K.H. Sim
Additional Editing
Holly Siegel
Archival Producers
Becca Bender

Motion Graphics
OAKES
Chris King

Andy Cahill
Still Photography Animations
FLYfx

Chris Connolly
Colorist
Richard Fairbanks
Supervising Sound Editor/Re-Recording

Ryan Dilts
Associate Editor
Brittany Kaplan
Lead Assistant Editor
Jamie Unruh
Assistant Editors
Todd Goings
Edward Wardrip
Alex Ragona

Scott Davis
Pre-Production Editor
Ben Meadors
Post Production Engineer
Cat Harris
Apprentice Editors
Mischa Aletta
Rachel Bozich

John Torrani
Synching
Melissa Weiss
Sound Effects
Kevin Peters
Additional Sound Effects
Juan Manuel Rios
Foley Artist
Brian Vancho
Layback
Framerunner
Sound Recording
Len Schmitz
Roger Phenix
Mark Mandler
Adriano Bravo
Susan Bryant
Frank Coakley
Dustin Eddo
John Gooch
Anton Herbert
Steve LaFayette
Caleb Mose
Nejc Poberaj
Rich Pooler
Mark Roy
Paul Schmitz
Chris Strollo
Charles Tomaras
Phil Turner

Additional Cinematography
Nora Ballard
John Chater
Rafael De La Uz
Wolfgang Held
Robert Humphreys
Edward Marritz
Ali Sargent

Additional Archival Producer
Justine Pierce
Researcher
Bonnie Foster
Fact Checker
Jillian Bergman
Script Assistant
Alexander Black
Production Associates
Ali Scattergood
Andrew Balamaci

Transcription
CLK Transcription, Inc.
Camera Assistant
Greg Brutus
Production Assistants
Joshua Benson
Rachel Behrmann
Jess Martinez
Robert Rodgame

Interns
Max Bloom
Anna Blum
Caitlin Davis
Galen Davis
Amanda Douville
Joss Fong
Lorelai Germain
Bahar Gholipour
Lucas Habte
Andy Han
Rachel Hawatmeh
Renusha Indralingam
Alexa Kurzius
Caroline Levine
Claire Maldarelli
Caroline Monahan
Hannah Newman
Paola Ochoa
Tandice Ossareh
Hsuan-Yu Pan
Clare Shin
Raghib Siddiqui
Ankita Sud
Ansa Varughese
Skyler Weinstein
Rebecca Welsh

Archival Materials
ABC VideoSource
AMERICAN CANCER SOCIETY
AMERICAN SOCIETY OF CLINICAL ONCOLOGY
AP ARCHIVE
AP IMAGES
BARASCH PORTRAITS
BBC/GETTY IMAGES
THE ASSOCIATED PRESS
BOSTON CHILDREN'S HOSPITAL
BOSTON, MASSACHUSETTS
BOSTON CITY ARCHIVES
BOSTON HERALD
BOSTON PUBLIC LIBRARY
BOSTON STREET RAILWAY ASSOCIATION INC.
BRIDGEMAN IMAGES
THE BRITISH MUSEUM
BRÖDEL ILLUSTRATIONS IN THE MAX BRÖDEL ARCHIVES, THE
BUDGET FILMS
STANLEY B. BURNS, MD AND THE BURNS ARCHIVE
CORBIS IMAGES
CORBIS MOTION
CRITICALPAST
DIERDRE CURLEY
DANA-FARBER CANCER INSTITUTE
DE HUMANI CORPORIS FABRICA
DR. VINCENT DEVITA
DENVER PUBLIC LIBRARY, WESTERN HISTORY/GENEALOGY COLLECTION
ARTHUR ELLIS
THOMAS FARBER
FRAMEPOOL
MARY FREI
DR. EMIL FREIREICH
GEORG-SPYER-HAUS
GETTY IMAGES
GOODMAN AND GILMAN PAPERS, UNIVERSITY OF UTAH LIBRARY
GPS VIDEO / MICHAEL PROSZINSKI
THE GRANGER COLLECTION, NYC
HARVARD COUNTWAY LIBRARY
HARVARD MEDICAL SCHOOL
HBO ARCHIVES
HISTORIC FILMS ARCHIVE

Archive Materials
Special Thanks to
The Staff of The Johns Hopkins Kimmel Cancer Center
The Staff of Charleston Area Medical Center in West Virginia
All the patients and families who graciously allowed us to film their journey
All of our interviewees who have made significant contributions toward the fight against cancer, and took the time to speak with us
And in memory of those who passed in the course of the making of this film

For WETA
President and CEO
Sharon Percy Rockefeller
Vice President, Production Management
Jim Corbley
Vice President, National Engagement & Interactive Media Interactive Media and Outreach
Anne Harrington Justin Rhodes Kathryn Wilson
General Counsel
Lisa Delaney
Vice President, Program Development & Syndication
Karen Fritz
Senior Director, Station Relations Project Manager
Suzanne Masri Khanh Phan
Vice President, External Affairs Director, National Publicity
Mary Stewart Kate Kelly
Series Art Director
Cynthia Aldridge
Project Director
Susie Miles
Production Controller
Krystal Fogg
Cancer: The Emperor of All Maladies is a production of Florentine Films, Laura Ziskin Pictures and WETA Washington, D. C. in association with Ark Media which are solely responsible for its content.
© WETA and Laura Ziskin Pictures, Inc. 2015
CANCER: The Emperor of all Maladies - Episode Two: The Blind Men and the Elephant
Credits
Episode 2

A Film by
Barak Goodman

Executive Producer
Ken Burns

Executive Producers
Dalton Delan
David S. Thompson
Pamela Oas Williams
Laura Ziskin

Edited by
Karen K. H. Sim

Written by
Geoffrey Ward and Ken Burns
Barak Goodman & David Blistein

Directed by
Deborah Dickson and Barak Goodman

Closing Credits
Senior Creative Consultant
Ken Burns
Series Producer
Barak Goodman
Based on the book "The Emperor of All Maladies: A Biography of Cancer" by Siddhartha Mukherjee
Narrator
Edward Herrmann
Field Producers
Ali Sargent
and
Lindsey Megru
Emily Singer Chapman
Music Composed By
David Cieri
Graphics and Animation
Molly Schwartz Studio
Jen Glabus
Dana Schechter
Jason Conradt
Garry Waller
Sean Donnelly
Ray Lewis
Daniel Kamhaji
Senior Scientific Advisors
Dr. Harold Varmus
Dr. Robert Weinberg
Associate Producers
Holly Siegel
Directors of Photography
Tom Denison
Nora Ballard
Robert Hanna
Stephen McCarthy
Sam Russell

Line Producer
Stef Gordon
Post Production Supervisor
Stephen Altobello
Additional Directing
Chris Durrance
Jack Youngelson
Additional Editing
Brittany Kaplan
Ed Barteski
Archival Producers
Holly Siegel
Becca Bender
Motion Graphics
OAKES
Chris King
Still Photography Animation
Will Rahilly
Visual Effects
Chris Connolly
Andy Cahill
FLYfx
Colorist
Chris Connolly
Supervising Sound Editor/Re-Recording
Richard Fairbanks
Story Consultant
Michael Epstein
Associate Editor
Brittany Kaplan

Assistant Editors
Ryan Dilts
Jamie Unruh
Todd Goings
Edward Wardrip
Alex Ragona
Pre-Production Editor
Scott Davis
Post Production Engineer
Ben Meadors
Synching
John Torrani
Melissa Weiss
Apprentice Editors
Cat Harris
Mischa Aletta
Rachel Bozich
Music Editing and Mix
Thomas Rutishauser
Sound Effects
Andrea Bella
Kevin Peters
Additional Sound Effects
Juan Manuel Rios
Foley Artist
Brian Vancho
Layback
Framerunner
Sound Recording
Len Schmitz
Roger Phenix
Mark Mandler
Adriano Bravo
John Chase
Frank Coakley
John Gooch
Anton Herbert
Steven LaFayette
Caleb Mose
Zak Piper
Nejc Poberaj
Mark Roy
Paul Schmitz
Chris Strollo
Charles Tomaras

Additional Cinematography
Nora Ballard
Ulli Bonnekamp
John Chater
Raphael De La Uz
Rob Goldie
Ryder Haske
Wolfgang Held
Robert Humphreys
Tom Hurwitz
Edward Marritz
Ali Sargent

Additional Archival Producer
Justine Pierce

Researcher
Bonnie Foster

Fact Checker
Jillian Bergman

Script Assistant
Alexander Black

Production Associates
Ali Scattergood
Andrew Balamaci

Transcription
CLK Transcription, Inc.

Interns
Max Bloom
Anna Blum
Caitlin Davis
Galen Davis
Amanda Douville
Joss Fong
Lorelai Germain
Bahar Gholipour
Lucas Habte
Andy Han
Rachel Hawatmeh
Renusha Indralingam
Alexa Kurzius
Caroline Levine
Claire Maldarelli
Caroline Monahan
Hannah Newman
Paola Ochoa
Tandice Ossareh
Hsuan-Yu Pan
Clare Shin
Raghib Siddiqui
Ankita Sud
Ansa Varughese
Skyler Weinstein
Rebecca Welsh

Archival Materials
ABC VideoSource
The Advertising Archives
American Cancer Society
American Society of Clinical Oncology
AP Archive
AP Images
Gary Azon
Linda Bartlett
BBC/ Getty Images
Dr. Michael Bishop
Blood Detectives," Directed by Joseph
Lovett, Produced by Lovett Productions,
Inc., Supported by the American Society
of Hematology
Boston Children's Hospital Archives,
Boston, Massachusetts
Boston Public Library
Brancoft Library, University of California,
Berkley
British National Archives
Richard Weymouth Brooks
Stanley B. Burns, MD and The Burns
Archive
The CONUS Archive
Corbis Images
Corbis Motion
CriticalPast
Dr. Vincent DeVita
Dolph Briscoe Center for American
History, The University of Texas at
Austin
Duke University Medical Archives
Center
Micahel Anthony Epstein
Robert Erwin
Dr. Bernard Fisher
Francis A. Countway Library of
Medicine, Center for the History of
Medicine
Genentech, a member of the Roche
Group
Getty Images
The Granger Collection, NYC
Harvard Medical School
HBO Archives
Historic Films Archive
Howard University Hospital
THE IMAGE WORKS, INC.
Images from the History of Medicine
(NLM)
ITN Source
Johns Hopkins Medical Archive
J. J. Kath
Dr. Dwight Kaufman
Library of Congress
Dr. Lance Liotta Laboratory
The Lasker Foundation
The Mary Lasker Papers, Columbia
Universtiy Archives
Magum Photos
Marilyn McGregor
MIT Museum
National Archives and Records Administration
National Cancer Institute
National Institutes of Health
National Library of Medicine
NBCUniversal Archives
Oregon Health and Science University
Paul Parker Photo
Photo Researchers
Dr. William P. Peters
Prelinger/ Getty Images
Redux Pictures/ New York Times
Dr. Charles Sawyers

Archival Materials
Science Source
Shutterstock
Streamline films
T3 Media
Terry Clark Photography
UCLA Film & Television Archives
UCLA Jonsson Comprehensive Cancer Center
UCSF Archives and Special Collections

University of Chicago Medicine
University of Pennsylvania School of Medicine
John Vachon
Dr. Harold Varmus
Diana H. Walker
Washington & Jefferson College Historic Archive
Washington University School of Medicine
Dr. Robert Weinberg
Bruce Wetzel and Harry Schaefer
WGBH Media Library & Archives
WJXT / NEWS4JAX
WNET
Wildfall Films
WPA Film Library

Website Short Films by Redglass Pictures
Co-Created by Sarah Klein and Tom Mason
Music By Ryan Whittier
Graphics and Associate Editing Garrett Weinholdt
Illustration Nina Frenkel
Animation Arthur Jones
Additional Camera Joshua Frank
Catherine Goldschmidt
Garrett Weinholdt

Sound Phil Shipman
Casting Gina Boyer
Special Thanks To Anne Grant
Barbara Bradfield
The Green Family
The Fornoff Family
The Waters Family
Star Herrmann
Amy Mone
The Siegel Family
Vanessa Wasta
Ali Pomeroy
S.H.A.R.E.
The Wilson and Dauphin Family
Alina Morris
Andrew Huff
Barbara Harkins
Beth Fisher
CancerCare
David Carbone
Gilda's Club New York City
David Keegan
Douglas Atkins
Elisa Williams
Ethan Mitchell
Jack Eckert
Jane Winton
Jeff Krulik
John Ziegler
Judy Grosberg
Kristina Bedford
Margaret Hughes
Polly Petit
Rachel Taketa
Sarah Eilers
Shirley Horn
Stephen Greenberg
Susan Merrell
Terrence Hurley
Wendy Stokes

Special Thanks To
The staff at The Johns Hopkins Kimmel Cancer Center
The staff at Howard University Hospital
The staff at Cedars-Sinai Medical Center
All the patients and families who graciously allowed us to film their journey
All of our interviewees who have made significant contributions toward the fight against cancer, and took the time to speak with us
And in memory of those who passed in the course of the making of this film.

For WETA
President and CEO Sharon Percy Rockefeller
Vice President, Production Management Jim Corbley
<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, National Engagement &amp; Interactive Media</td>
<td>Anne Harrington</td>
</tr>
<tr>
<td>Interactive Media and Outreach</td>
<td>Justin Rhodes</td>
</tr>
<tr>
<td>General Counsel</td>
<td>Kathryn Wilson</td>
</tr>
<tr>
<td>Vice President, Program Development &amp; Syndication</td>
<td>Karen Fritz</td>
</tr>
<tr>
<td>Senior Director, Station Relations</td>
<td>Suzanne Masri</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Khanh Phan</td>
</tr>
<tr>
<td>Vice President, External Affairs</td>
<td>Mary Stewart</td>
</tr>
<tr>
<td>Director, National Publicity</td>
<td>Kate Kelly</td>
</tr>
<tr>
<td>Series Art Director</td>
<td>Cynthia Aldridge</td>
</tr>
<tr>
<td>Project Director</td>
<td>Susie Miles</td>
</tr>
<tr>
<td>Production Controller</td>
<td>Krystal Fogg</td>
</tr>
</tbody>
</table>

Cancer: The Emperor of All Maladies
is a production of Florentine Films,
Laura Ziskin Pictures and WETA
Washington, D. C.
in association with Ark Media
which are solely responsible for its content.
© WETA and Laura Ziskin Pictures, Inc. 2015
**CANCER: The Emperor of all Maladies - Episode Three:**
Finding the Achilles Heel Credits

**Episode 3**

**A Film by**
Barak Goodman

**Executive Producer**
Ken Burns

**Executive Producers**
Dalton Delan
David S. Thompson
Pamela Oas Williams
Laura Ziskin

**Edited by**
Nancy Novack

**Written by**
Geoffrey Ward and Ken Burns
Barak Goodman & David Blistein

**Directed by**
Chris Durrance and Barak Goodman

### Closing Credits

**EPISODE THREE**

<table>
<thead>
<tr>
<th>Role</th>
<th>Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Creative Consultant</td>
<td>Ken Burns</td>
</tr>
<tr>
<td>Series Producer</td>
<td>Barak Goodman</td>
</tr>
<tr>
<td>Based on the book &quot;The Emperor of All Maladies: A Biography of Cancer&quot; by Siddhartha Mukherjee</td>
<td>Edward Herrmann</td>
</tr>
<tr>
<td>Narrator</td>
<td>Lindsey Megrue</td>
</tr>
<tr>
<td>Field Producers</td>
<td>Ali Sargent</td>
</tr>
<tr>
<td></td>
<td>Jamila Ephron</td>
</tr>
<tr>
<td></td>
<td>Emily Singer Chapman</td>
</tr>
<tr>
<td>Music Composed By</td>
<td>Greg Kalember</td>
</tr>
<tr>
<td></td>
<td>Ed Bilous</td>
</tr>
<tr>
<td></td>
<td>David Cieri</td>
</tr>
<tr>
<td>Additional Music by</td>
<td>Joel Goodman</td>
</tr>
<tr>
<td>Graphics and Animation</td>
<td>Molly Schwartz Studio</td>
</tr>
<tr>
<td></td>
<td>Jen Glabus</td>
</tr>
<tr>
<td></td>
<td>Dana Schechter</td>
</tr>
<tr>
<td></td>
<td>Jason Conradt</td>
</tr>
<tr>
<td></td>
<td>Garry Waller</td>
</tr>
<tr>
<td></td>
<td>Sean Donnelly</td>
</tr>
<tr>
<td></td>
<td>Ray Lewis</td>
</tr>
</tbody>
</table>
Daniel Kamhaji
Dr. Harold Varmus
Dr. Robert Weinberg

Holly Siegel
Tom Denison
Nora Ballard

Robert Hanna
Stephen McCarthy
Sam Russell

Stef Gordon
Stephen Altobello

Deborah Dickson
Jack Youngelson

Peter R. Livingston, Jr.
Jamie Unruh

Holly Siegel
Becca Bender

OAKES
Chris King

Andy Cahill
FLYfx

Chris Connolly
Chris Connolly

Richard Fairbanks

Jamie Unruh
Brittany Kaplan

Ryan Dilts
Todd Goings
Edward Wardrip
Alex Ragona

Scott Davis
Ben Meadors

Cat Harris
Mischa Aletta
Rachel Bozich

John Torrani
Melissa Weiss

Jordan Moser
Jeffrey Stern

Kevin Peters
Brian Vancho

Framerunner

Len Schmitz
Roger Phenix
Mark Mandler

Richard C. Aylsworth
Adriano Bravo
Susan Bryant
Michael Boyle
Mario Cardenas
Frank Coakley
Dustin Eddo
John Gooch
Steve Guercio
Anton Herbert
Steve Hopkins
Marc Hoppe
Chad Hunt
Steven LaFayette
Daniel McMullen
Caleb Mose
Zak Piper
Nejc Poberaj
Anna Rieke
Mark Roy
Stephen Schmidt
Paul Schmitz
Charles Tomaras

Additional Cinematography
Nora Ballard
Ulli Bonnekamp
John Chater
Rafael De La Uz
Rob Goldie
Steve Guercio
Wolfgang Held
Ryder Haske
Kevin Hudson
Robert Humphreys
Edward Marritz
Ali Sargent
Sam Shinn
Brian Wengrofsky
Christina Wolf

Additional Archival Producer
Justine Pierce
Researcher
Bonnie Foster
Fact Checker
Jillian Bergman
Script Assistant
Alexander Black
Production Associates
Ali Scattergood
Andrew Balamaci
Transcription
CLK Transcription, Inc.
Assistant Camera
Greg Brutus
Brian Taylor
JP Fulks
Victor Taibi
Production Assistant
Joshua Benson
Interns
Max Bloom
Anna Blum
Caitlin Davis
Galen Davis
Amanda Douville
Joss Fong
Lorelai Germain
Bahar Gholipour
Lucas Habte
Andy Han
Rachel Hawatmeh
Renusha Indralingam
Alexa Kurzius
Caroline Levine
Claire Maldarelli
Caroline Monahan
Hannah Newman
Paola Ochoa
Tandice Ossareh
Hsuan-Yu Pan
Clare Shin
Raghib Siddiqui
Ankita Sud
Ansa Varughese
Skyler Weinstein
Rebecca Welsh

Archival Materials

Abramson cancer Center of the University of Pennsylvania
Adam Voohes Photography
American Cancer Society
Derek Bayes/ Aspect Picture Library
AP Images
AP Archive
John Banzhaf
BBC / Getty Images
Bridgeman Images
Boston Children’s Hospital Archives, Boston, Massachusetts
Boston Herald
Boston Public Library
Cambridge Institute for Medical Research / Gillian Griffiths
Cancer Research Institute

Cartoon Stock
Illustration reproduced courtesy of Cell Signaling Technology, Inc.
Cicely Saunders International
Columbia Presbyterian Hospital

Corbis Images
Corbis Motion
Dr. Bernard Fisher
Genentech, a member of the Roche group
Getty Images
The Granger Collection, NYC

Archival Materials

HBO Archives
Historic Films Archive
Images from the History of Medicine (NLM)
ITN Source
Johns Hopkins Medical Archive
Library of Congress
Mary-Claire King
Memorial Sloan Kettering Cancer Center Archives
National Archives and Records Administration
Johanna Cook
The Cole Family
Beverly Farmer
Beth Fisher
The Gomez Family
The Hager Family
The Hartzog Family
Star Herrmann
The Hisey Family
Andrew Huff
Terence Hurley
David Keegan
Life Sciences Foundation
Dr. David Mendez
Amy Mone
Alina Morris
Alan Mortensen
Ali Pomeroy
The Rodighiero Family
The Rogers Family
Rachel Salis-Silverman
The Santos Family
Wendy Stokes
Karen Taphorn
Rachel Taketa
The Tonkin Family
The Top of The World, Baltimore, MD
Vanessa Wasta
The Waters Family
The Whitehead Family
The Wilson and Dauphin Family
Jane Winton
Timothy Wisniewski
Dale Witte

Special Thanks To
The staff at Abramson cancer Center of the University of Pennsylvania
The staff at Charleston Area Medical Center in West Virginia
The staff at Children's Hospital of Philadelphia
The staff at David Lee Cancer Center
The staff at Johns Hopkins Kimmel Cancer Center
The staff at Memorial Sloan Kettering
The staff at National Cancer Institute
All the patients and families who graciously allowed us to film their journey
All of our interviewees who have made significant contributions toward the fight against cancer, and took the time to speak with us
And in memory of those who passed in the course of the making of this film.

For WETA
Cancer: The Emperor of All Maladies
is a production of Florentine Films, Laura Ziskin Pictures and WETA Washington, D. C. in association with Ark Media which are solely responsible for its content.

© WETA and Laura Ziskin Pictures, Inc. 2015