

Inside OUT

PRODUCED BY THE DENVER CENTER FOR THE PERFORMING ARTS

January 2011

World Premiere
Map of Heaven
by Michele Lowe
Directed by Evan Cabnet



Map OF HEAVEN

DENVERCENTER.ORG | 303.893.4100

SPONSORED BY



THE
WOMEN'S
VOICES
FUND

PRODUCING PARTNERS

Jim STEINBERG & Karolynn LESTRUD Terry & Noel HEFTY

Recipient of an Edgerton Foundation for New American Plays Award

2010/11
SEASON SPONSORS

STEINBERG
CHARITABLE TRUST

WELLS
FARGO

SCFD



LARIMER SQUARE

THE DENVER POST
COMMUNITY

JAN 14 - FEB 26

Use of study guide materials for publication requires permission from the Marketing Department of The Denver Center for the Performing Arts.

Inside&OUT

Douglas Langworthy Editor
Sally Gass Contributing Writer
David Saphier Education Contributor
Tina Risch Community Services Manager
Stacy Shaw Vice President of Marketing & Communications
Seth Holt Designer



ADDITIONAL SUPPORT PROVIDED BY:



Administration 303.893.4000
Box Office 303.893.4100
DENVERCENTER.ORG

SYNOPSIS

Lena Gates is a talented painter about to open her first show at the gallery of her dealer, Rebecca Marks. Everyone is excited for her, including her husband, Ian, a prominent radiologist who, with the aid of influential and wealthy patrons, has opened a free mammography clinic for women who cannot afford to pay. Also enthusiastic is Ian's sister, Jen, a waitress with an acceptance to the Kennedy School of Government at Harvard and a strong sibling rivalry with Ian.

All is going smoothly until Ian makes a mistake in his practice that has profound ramifications. Is Ian overwhelmed by too many patients? Or is he distracted by his love of flying? The disorder that erupts, upsets everyone and threatens to upend the careers of all the characters.

THE PLAYWRIGHT



Michele Lowe is the author of *Inana*, winner of the 2010 Francesca Primus Award, which premiered in February 2009 at the Denver Center Theatre Company. Lowe's play *Victoria Musica* premiered in the fall of 2009 at Cincinnati Playhouse in the Park. She was a finalist for the 2009 Susan Smith Blackburn Prize and was nominated for both *Inana* and *Victoria Musica* for the 2010 Steinberg/ATCA New Play Award. Her plays include *The Smell of the Kill* (Broadway debut); *String of Pearls* (Primary Stages, Outer Critics Circle nomination for Outstanding Off-Broadway Play); *Mezzulah, 1946* (City Theatre), and *Backsliding in the Promised Land* (Syracuse Stage). She is the librettist and lyricist for the musical *A Thousand Words Come to*

Mind (Zipper Factory Theatre) which she wrote with composer Scott Richards. She is currently developing *Map of Heaven* and *Good on Paper*.

Lowe has been commissioned by the Cincinnati Playhouse, the Denver Center Theatre Company, Arden Theatre and Geva Theatre. Her plays have been produced by the Vineyard Theatre, Intiman Theatre, Florida Stage, Reykjavik City Theatre (Iceland), Berkshire Theatre Festival, Asolo Repertory Theatre and Cleveland Playhouse among others. Her work has been developed at the Eugene O'Neill National Music Theatre Conference, the Colorado New Play Summit, New Harmony Project, PlayLabs, New York Stage and Film, Harford Stage's BRAND: NEW Festival, the ACT & Hedgebrook Women Playwrights Festival and the Lark Play Development Center. Her work appears in *New Playwrights/The Best Plays of 2005* (Smith and Kraus, 2006), *The Best Women's Stage Monologues 2005* (Smith and Kraus, 2006) and *Monologues for Women by Women* (Heinemann, 2004.) Screenplays include *The Emergence of Emily Stark* and *Quitting Texas*. Lowe is a graduate of Northwestern University's Medill School of Journalism. She is a member of the Dramatists Guild and ASCAP. She recently completed her first novel, *It Goes Without Saying*.

.....
<http://www.dramaticpublishing.com/AuthorBio.php/titlelink=10068>
.....

MAMMOGRAPHY

.....
GAIL: *Somebody was supposed to call me but nobody did.*

—*Map of Heaven*

.....

Mammography is a specific type of imaging that uses a low dose X-ray system to examine breasts. In the exam, pictures (called mammograms) are taken to aid in the early detection and diagnosis of breast disease, especially in women. The X-ray (radiograph) is a noninvasive medical test that helps physicians diagnose and treat medical conditions.

A good mammogram facility will adhere to the standards set up by the Mammography Quality Standards Act (MQSA). The regulations demand that each facility have:

1. “Physicians who interpret a mammogram, radiological technologists who perform mammography and medical physicists who have adequate training in surveying the proper equipment.”¹
2. An effective quality control system and thorough maintenance of records.
3. A review of mammograms by the FDA (US Food and Drug Administration) to evaluate the amount of radiation being used.
4. A system for following up on mammograms that show abnormalities and for obtaining biopsy results.
5. Yearly inspections by the FDA or state certified inspectors.

The American College of Radiology has developed a code to describe mammogram findings:

Category 0. Assessment is incomplete and additional imaging is needed.

Category 1. No significant abnormality to report.

Category 2. A negative mammogram result that has found a benign lesion. This category ensures that other individuals viewing the mammogram will not misinterpret the findings.

Category 3. Probably a benign finding that suggests the need for a short-term follow-up. Since the results have not definitely proved benign, the doctor will want to see if changes occur, first after six months of the first year and then yearly.

Continued on next page

Continued from page 4

Category 4. The mammogram shows a suspicious abnormality that will require a biopsy.

Category 5. These findings are characteristics of cancer with a suspected high degree of malignancy. A biopsy is needed.

When a facility is certified for mammography, the FDA now requires that women must be notified within 30 days in writing of the results of their mammograms. This practice came in response to reports that some women were not informed soon enough if their mammogram findings were suspicious. Of course, the woman's Primary Care Physician is notified and he/she may order additional tests or treatment.

"Mammograms are the most monotonous type of work" writes Dr. Jerome Groopman in his book, *How Doctors Think*.² Finding breast tumors is not easy; a cancerous lesion can be seen on a mammogram only if it looks different from surrounding tissue. In some cases, the cancer is indistinguishable from normal tissue.

-
1. Turkington and Krag, p. 148.
 2. Groopman, p. 187.

<http://www.radiologyinfo.org/en/infocfm?pg=mammo>

Finkel, Madelon L. *Understanding the Mammography Controversy*. London: Praeger, 2005.

Groopman, Jerome, MD. *How Doctors Think*. Boston: Houghton Mifflin Co., 2002.

Turkington, Carol and Krag, Karen, MD. *The A to Z of Breast Cancer*. New York: Checkmark Books, 2006.

PATIENT-DOCTOR COMMUNICATION

.....
**IAN: And the ones that need face time, the ones I want to sit with —
what do I give them? A minute, maybe two —
because I've got 20 other women waiting.**

—*Map of Heaven*
.....

Multiple challenges exist in today's medical environment. "Limited appointment time, the ability of patients to do their own research which then needs to be discussed with practitioners, and the number of patients who are undiagnosed or misdiagnosed; these challenges and others make effective communications between patients and their practitioners more important than ever."¹

Good communication really boils down to two elements: respect of the doctor for the patient and vice-versa. If a patient wishes to be a good communicator, he/she should adhere to the following suggestions:

1. Be mindful of the doctor's limited time. "While some references tell us a patient has an average of only 8 to 10 minutes per appointment with his doctor, other references say the average is 16-20 minutes."²
2. The difference may be due to the kind of visit, whether the doctor is primary care or a specialist or even whether or not the patient has health insurance. Regardless of the difference, it makes more sense for the patients to prepare ahead for the probability that the visit will be shorter than expected.
3. Be concise in communicating. Prepare questions ahead of appointments and stick to the facts. With so little appointment time be sure the doctor has all the important information about your problems so that the physician has time to answer all your questions.
4. Ask the meanings of words and concepts you don't understand. Doctors are trained to use a lexicon of med-speak that puzzles many patients. Stop the physician and ask for a definition or description when he/she uses a concept or term you don't understand.
5. If interrupted, ask the doctor to stop and listen respectfully. If interrupted, politely ask the practitioner to listen to your entire list of symptoms or to let you ask your complete question.
6. Ask the doctor what to expect next. Before, during or after diagnosis or treatment, asking the physician what happens next will help you understand what is going on immediately and what outcomes to expect.

Continued on next page

Continued from page 6

7. Know which questions to ask the doctor and which to save for other people. Your doctor is the person who should respond to your medical questions.

A doctor or practitioner who is a good communicator:

1. Has respect for patients. Good doctors understand that a sick or injured person is highly vulnerable. “Being respectful goes a long way toward helping that patient explain symptoms, take responsibility for decision making and complying with instructions.”³
2. Has the ability to share information in a way that patients can understand. It is all right to use med-speak and complicated terms if they are accompanied by explanations.
3. Doesn’t interrupt or stereotype patients. Listening carefully and respectfully will go a long way toward better outcomes for all concerned.
4. Has the ability to manage patients’ expectations. By helping patients understand what the next steps will be, the possible outcomes and their ramifications, the doctor can go a long way toward helping that patient understand their problem.

-
1. patients.about.com
 2. Ibid.
 3. Ibid.

<http://patients.about.com/od/therightdoctorforyou/a/docpatientcomm.htm>

SECOND OPINIONS

According to Roizen and Oz's book *You: the Smart Patient*, there are three possibilities in getting a second opinion. First, the consulting doctor could agree with the first diagnosis and advise going ahead as planned. Second, the consulting doctor could agree on some points but offer different thoughts or solutions to others. Finally, the consulting doctor does not agree with your doctor's conclusions and advises a different course of action. Though it may cost some time, it can save a lot of trouble. "Research has found that getting a second opinion results in a new diagnosis in as many as 30% of all cases."¹

Roizen and Oz recommend seeking a second opinion in the following situations:

- When you are told you need surgery.
- When your doctor can't diagnose your condition.
- When you need to consult a highly qualified specialist.
- When the care you're receiving isn't giving positive results.
- When your doctor doesn't seem to take your symptoms seriously enough.
- When you've lost faith in your doctor.

.....

1. Roizen and Oz, p. 224.

Roizen, Michael F., MD and Oz, Mehmet, C., MD. *You: the Smart Patient*.
New York: Free Press, 2006.

.....

COSTS OF MAMMOGRAPHY & MEDICAL EQUIPMENT

.....
IAN: I go to conferences now and all anybody wants to talk about is square footage and overhead and the cost of updating machinery.

— *Map of Heaven*
.....

American Medical News, April 19, 2010, reports that the prices of many products used in health care likely will begin to escalate again, according to a report by Premier Health Care Alliance, a hospital and health system-owned data research and analysis center. The president of Premier, Mike Alkire, said, “We suspect we are going to see pretty substantial increases over the next 12 to 18 months.”¹ According to the center’s “Economic Outlook” report, surgical supplies will go up by 2.8%, nurses’ supplies will increase by 2.4% and the price of clinical laboratory supplies will grow by 3.9%.

In the field of radiology/mammography, the equipment needed is exorbitantly expensive; a mammography machine can cost from \$80,000 to \$125,000. In addition, the X-ray technology used for more than 35 years is being evaluated now and is soon to be replaced by digital technology. Digital mammography has been shown to improve breast cancer detection in 65% of women according to a study published in *The New England Journal of Medicine* in September, 2005. The National Cancer Institute reports that 10 to 20% of breast cancers detected in physical exams are not visible on film-based mammograms. Dense breast tissue that can be a problem in film-based pictures poses no limitations in digital mammography because it generates images with good contrast and sharpness. The process takes less time and uses a lower dose of radiation.

However, the equipment is considerably more expensive. The machine can cost as much as \$500,000 as compared to \$80,000 to \$125,000 for traditional analog machines. But factors like the ability to process more patients, not having to pay for X-ray film, processing and chemicals could balance out the difference in cost.

.....
1. ama-assn.org.

<http://www.ama-assn.org/amednews/2010/04/19/bise0419.htm>

<http://www.absolutemed.com/Medical-Equipment/Mammography-machines>

<http://www.jsonline.com/business/29428594.html>
.....

PHYSICIAN BURNOUT

ESPECIALLY IN RADIOLOGISTS & ONCOLOGISTS

In past years the relative attraction of radiology as a career choice among medical students has increased steadily. Students perceive that this field has a controllable lifestyle, which includes fewer work hours and rare night calls. Thus, they can give more time to family and recreational pursuits.

However, results of studies among 3,000 diagnostic radiologists, radiation oncologists and nuclear medicine specialists, revealed that only about 50% would recommend a career in radiology. In the same study 41% of radiologists surveyed said that for the last five years they have disliked working in their field.

Why are these physicians dissatisfied with their careers? We must consider burnout and the factors that contribute to it. For radiologists the reasons are depersonalization, emotional exhaustion and loss of personal satisfaction.

Depersonalization occurs because of the nature of the field itself which tends to distance the physician from the patient. Radiologists seldom meet the patients whose images they are viewing. Distance from patients can keep radiologists from knowing that patients have benefitted from their service and hard work.

Oncologists suffer from burnout because of the stress of dealing with patients who have life-threatening illnesses and the suffering and tragedy they see each day. In addition, they report work overload and poor management and resourcing in hospital staffs. However, many oncologists report they do sense a high rate of personal accomplishment stemming from their perception that they are positively influencing their patients' lives.

.....
<http://radiology.rsna.org/content/238/3/767>.

<http://www.cancernetwork.com/display/article/10165/76603>
.....

MEDICAL MALPRACTICE

.....

REBECCA: You can blame anybody for anything.

—*Map of Heaven*

.....

“**M**edical malpractice is professional negligence by act or omission by a health care provider in which care provided deviates from accepted standards of practice in the medical community and causes injury or death to the patient.”¹

According to Dr. Atul Gawande in his book *Complications*, most surgeons are sued at least once in their careers; virtually anyone who cares for hospital patients makes serious mistakes or commits acts of negligence every year.

Medical malpractice suits are an ineffective remedy to preventing mistakes in medicine. Troyen Brennan, a Harvard researcher of law and public health, has found no evidence that litigation reduces medical error rates.

Another problem with medical malpractice suits is that by demonizing errors, doctors are prevented from discussing them publicly. In our legal system a lawsuit makes adversaries out of patient and physician and propels each to offer a slanted version of events. “Hospital lawyers warn doctors that, although they must, of course, tell patients about injuries that occur, they are never to intimate that they were at fault, lest the ‘confession’ wind up in court as damning evidence.”²

-
1. en.wikipedia.org
 2. Gawande, p. 57

http://en.wikipedia.org/wiki/Medical_malpractice

<http://www.thedenverchannel.com/news/17791225/detail.html>

Cardona, Felissa. “Patient Seeks \$15 Million for Surgical Clamp Left in Chest at Denver VA.” *The Denver Post*. Aug.18, 2010.

Gawande, Atul. *Complications*. New York: Picador, 2002.

.....

NAMES & TERMS

IN THE PLAY

TIM ROBBINS: American actor, screenwriter, director, producer, activist and musician. Oscar-winner as Best Supporting Actor for *Mystic River*.

SUSAN SARANDON: American actress who won the Academy Award for Best Actress for her performance in *Dead Man Walking*.

RONALD LAUDER: American businessman, civic leader, philanthropist and art collector. He opened the Neue Galerie in 2001 in New York City, an art museum dedicated to works of art from Germany and Austria in the early 20th century. He owns the painting “Portrait of Adele Bloch-Bauer I” by Gustave Klimt for which he paid \$135 million.

ARTS & CRAFT MOVEMENT: An international design movement that flourished between 1880-1910. It advocated truth to materials and traditional craftsmanship using simple forms.

BAUHAUS: A movement in Germany founded by Walter Gropius that combined crafts and the fine arts and was famous for the approach to design that it publicized and taught. It operated in Weimar, Dessau and Berlin from 1919 to 1933.

JOHN F. KENNEDY SCHOOL OF GOVERNMENT: A public policy and public administration school. It is located at Harvard University in Cambridge, MA, and is one of Harvard’s graduate and professional schools. It offers master’s degrees in public policy, public administration and international development as well as granting several doctoral degrees. In addition, it administers executive programs for senior government officials and conducts research in subjects relating to politics, government, international affairs and government. It was founded in 1936 but in 1966 the school was named for President John F. Kennedy.

.....
http://en.wikipedia.org/wiki/John_F._Kennedy_School_of_Government
.....

THE NEW YORK CITY

ART SCENE

New York City’s art scene has always been competitive, but in the 1980s the visual art market blossomed. “Reaganomics” with its so-called trickle-down theory of wealth initiated strong growth in the stock market.

“Yuppies” (young urban professionals) gained significant wealth and bought art as a social signifier to display their lifestyle. In addition, the Japanese economy boomed and created high demand for art, especially the French Impressionists. They were willing to bid and pay millions for the pieces they prized.

After peaking in November 1990, the overheated market crashed and the stream of available liquidity dried up. Even the Japanese collectors disappeared because of the tense situation in their own market. Scandals in the art world and political instability (the first Gulf War) further worsened the situation.

The art market dropped again in 2000, reflecting the burst of the dot-com bubble, which decreased purchasing power, especially in the United States. But in 2005 the US and UK art markets rallied because of the competition of auction houses, wider accessibility of art market data, resumed growth of financial markets and the search for investment alternatives—until the housing bubble burst in 2008 resulting in the current recession.

Kenndler, Valentin. “NYC’s Role as a Global Hub in the Contemporary Art Market.” Diploma Thesis, 2007.

<http://www.interviewmagazine.com/art/the-new-york-art-scene/>

GETTING A

PRIVATE PILOT'S LICENSE

To obtain a private pilot's license a person must be at least 17 years old and be able to read, speak, write and understand the English language. The candidate must receive a logbook endorsement from an authorized instructor who has conducted the training and certified that the person can pass a required knowledge test. A candidate must log ground and flight training from an authorized teacher in such categories as pre-flight procedures, take-offs and landings, navigation, basic instrument maneuvers, emergency operations, night operations and post-flight procedures.

The cost for such training ranges from \$6000 to \$10,000.

.....
<http://www.aviationwise.org/privatepilot.html> html
.....

NOTE TO TEACHERS:

Note to Teachers: It takes more than 50 trained professionals to bring you any single production at the Denver Center Theatre Company. Did you know that Colorado has over 186,000 people employed in what are called the Creative Industries? Career Exploration and ICAPs (Individual Career and Academic Plans) are part of the new Post Secondary and Workforce Readiness Standards adopted by the State Board of Education <http://www.cde.state.co.us/cdegen/downloads/PWRdescription.pdf>. Creative Careers are “front and center” in this conversation. Your students can find out more about themselves and the career pathways open to them at Colorado’s free online Career and College Planning Tool, www.CollegeinColorado.org. They will find out about trends and salaries for thousands of jobs across the state. They can explore colleges and courses that will prepare them for successful careers and learn what they need to know about paying for college, applying for grants, loans and scholarships.

College in Colorado is pleased to offer your students a free Career Exploration Workshop in your classroom. For more information, please contact Gully Stanford, Director of Partnerships at 720-264-8563 or gully.stanford@cic.state.co.us

CollegeInColorado.org™
GO FURTHER → GO TO COLLEGE

MAP OF HEAVEN QUESTIONS

PRE-SHOW QUESTIONS

- 1) What is the purpose of maps and how do we use them? Do you always follow the route a map tells you and can it be trusted? Are there different routes and better routes to take? How do maps help us through our lives?
 - 2) How are doctors responsible for making the decisions that affect their patients' lives? How are patients responsible for making the decisions that will affect their lives? Is medicine a science or an art?
 - 3) Explain why or why not you would want to know how much time you had left in your life.
-

POST SHOW QUESTIONS

- 1) How would you describe the relationship between Lena and Ian? Between Rebecca and Lena? Between Ian and Jen? What causes their relationships to change?
- 2) Why are maps so important to this story?
- 3) Explain if you would make the same choice Ian made regarding his patient. What would you have done differently?
- 4) Explain if you agree with Rebecca's decision regarding Lena's art show.
- 5) How does Jen's story fit into the play? Is she happy with her life as waitress?
- 6) Why does Ian want to learn how to fly?
- 7) What do you think happens to Lena after the play is over?

MAP OF HEAVEN ACTIVITIES

MAP MAKING

- 1) Start by looking at various kinds of maps: road maps, historical maps, flowcharts, artistic maps, etc. Discuss why maps are created and why they are used. Discuss what similarities maps have such as legends, symbols and routes.
- 2) Create a map of your life. What choices in the past have you made and how did they affect your journey? Where would the journey have led if you had taken a different route? What symbols would you need on your map to represent important moments in your life?
- 3) Add to your map some goals for your future: going to college, a pathway to a career, starting a family, etc. What are the different ways that you could get to your goals? Create a legend for the obstacles and avenues that you might take.

Colorado Model Content Standards

Geography 1.1: Students know how to use maps, globes, and other geographic tools to acquire, process, and report information from a spatial perspective.

Visual Arts 2: Students know and apply elements of art, principles of design, and sensory and expressive features of visual arts.

MAP OF HEAVEN ACTIVITIES CONTINUED

COURTROOM DRAMA

- 1) A patient decides to take his case against a doctor to court. Split the class into two separate groups. One group is hired to represent the patient. One group is hired to represent the doctor. Before you begin, find a consensus with the whole group on what happened. Was there a misdiagnosis or mistreatment? What happened?
- 2) After seeing the performance of *Map of Heaven*, take the issue from the play and apply it to the debate.
- 3) Brainstorm with your group the arguments for your side of the case. What is the transgression? Who is at fault and why is he/she at fault? Are there other characters that need to be represented or called as witnesses?
- 4) From the two groups, pick some students who will be able to impartial. Have a mock trial where the two sides can make their argument.

Colorado Model Content Standards

Civics 4: Students understand how citizens exercise the roles, rights, and responsibilities of participation, in civic life at all levels – local, state and national.