

ARTISTS REP 17/18



January 20—February 18 Time : 1986 Winter (Late-February to the end of October) Setting: An international research-station at the South Pole in Antarctica [5 part adventure with 3 intermissions and 1 dinner break]

Magellanica Study Guide

Spoilers ahead!

Study guide prepared by Jen Bigoness, Marketing & PR Department Intern

Cast

Dr. Morgan Halsted	Sara Hennessy+
Dr. May Zhou	Barbie Wu±
Dr. Vadik Chapayev	Michael Mendelson+*^
Captain Adam Burrell	Vin Shambry+^
Dr. Lars Brotten	Eric Pargac+
Dr. Todor Kozlek	Allen Nause+ ^
Dr. William Huffington	Joshua J. Weinstein+^
Freddie de la Rosa	John San Nicolas+^

Creative Team

Director Scenic Designer	
Costume Designer	
Lighting Designer	
Composer/Sound Designer	
Stage Manager	Jamie Lynne Simons+
Props Master	
Voice & Text Director	Mary McDonald-Lewis^
Resident Fight Choreographer	Jonathan Cole*
Dramaturg	Luan Schooler
Assistant Director	Tamera Lyn
Projection Designer	
Assistant Lighting Designer	Trevor Sargent
Assistant Sound Designer	Jake Newcomb
Assistant Stage Manager	
Production Assistant	Karen Hill±



ABOUT THE THEATRE



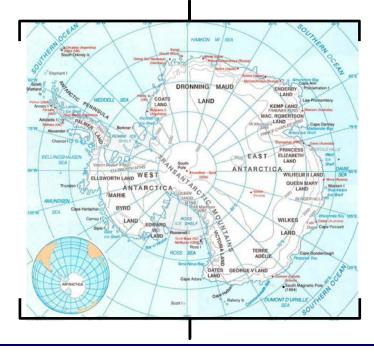
Artists Repertory Theatre's mission is to produce intimate, provocative theatre and provide a home for artists and audiences of varied backgrounds to take creative risks. Artists Rep is Portland's premiere midsize regional theatre company and is led by Artistic Director/Interim Managing Director Dámaso Rodríguez.

Founded in 1982, Artists Repertory Theatre is the longest-running professional theatre company in Portland. Artist Rep became the 72nd member of the League of Resident Theatres (LORT) in May 2016 and is an Associate Member of the National New Play Network (NNPN).

SHOW DESCRIPTION

In 1986, scientists and engineers from around the world converge at the South Pole Research Station to figure out, among other things, if there really is a hole in the sky. In the darkest, coldest, most dangerous place on Earth, eight imperfect souls are trapped together. Utterly isolated from the outside world for eight and a half months, this research team must face life or death challenges, their own inner demons and depend upon each other for survival.

Map of Antarctica









E. M. Lewis is an award-winning playwright, teacher, and librettist. Her work has been produced around the world, and published by Samuel French. She received the Steinberg Award for Song of Extinction and the Primus Prize for Heads from the American Theater Critics Association, the Ted Schmitt Award from the Los Angeles Drama Critics Circle for outstanding writing of a world premiere play, an L.A. Weekly Award for Production of the Year, a Hodder Fellowship from Princeton University, a playwriting fellowship from the New Jersey State Arts Commission, and the 2016 Oregon Literary Fellowship in Drama. Her play Now Comes the Night was part of the Women's Voices Theater Festival in Washington DC, and was published in the anthology Best Plays from Theater Festivals 2016. *The Gun Show* premiered in Chicago in 2014, and has since been produced in more than a dozen theatres across the country, including Coho in Portland, and at the Edinburgh Fringe Festival in Scotland; it was published in The Best American Short Plays 2015-2016. Other plays by Lewis include: Infinite Black Suitcase, Goodbye, Ruby Tuesday, Reading to Vegetables, True Story, Apple Season, and You Can See All the Stars (a play for college students commissioned by the Kennedy Center). In 2018, Lewis' epic Antarctica play, *Magellanica*, will have its world premiere at Artists Repertory Theatre in Portland. *How* the Light Gets In will have a reading in the 2018 Fertile Ground Festival. Song of Extinction will have a reading at the Portland Civic Theater Guild. Lewis will spend five weeks in residence at Southern Illinois University at Edwardsville, teaching playwriting and working with students on the workshop production of a big, new political play set in her home state of Oregon called *The* Great Divide. In addition, Lewis will premiere Town Hall, a new opera written with composer Theo Popov, at the University of Maryland Opera Studio in February, and continue to work on a full-length, family-friendly opera, written with composer Evan Meier, commissioned by American Lyric Theater, called Sherlock Holmes and the Case of the Fallen Giant. Lewis is a proud member of LineStorm Playwrights, ASCAP, and the Dramatists Guild.





Dámaso Rodríguez is in his fifth season as Artistic Director of Artists Rep. He is a co-founder of L.A.'s Furious Theatre, where he served as co-artistic director from 2001–2012. From 2007–2010 he served as associate artistic director of the Pasadena Playhouse, where he directed main stage productions and oversaw programming for the Playhouse's second stage, including its Hothouse New Play Development Program. His directing credits include work at the Pasadena Playhouse, Intiman Theatre, South Coast Repertory, Laguna Playhouse, A Noise Within, The Playwrights' Center, The Theatre@Boston Court, Odyssey Theatre, The Blank Theatre, The Road Theatre, The Zephyr Theatre and Furious Theatre. Directing credits: The World Premiere musical *Cuba Libre* by Carlos Lacámara featuring the 3-time Grammy nominated band Tiempo Libre, The Skin of Our Teeth by Thornton Wilder, The Miracle Worker by William Gibson, Portland premieres of Stephen Karam's *The Humans*, Nina Raine's *Tribes* and David Ives' The Liar, the Northwest premieres of Branden Jacobs-Jenkins' An Octoroon (co-director), Carlos Lacámara's Exiles and Nick Jones' Trevor, the West Coast premieres of Dan LeFranc's The Big Meal and Charise Castro Smith's Feathers and Teeth, the U.S. premiere of Dawn King's Foxfinder in Portland at Artists Rep; Ruth and Augustus Goetz' The Heiress (starring Richard Chamberlain), Lillian Hellman's The Little Foxes (starring Kelly McGillis), Austin Pendleton's Orson's Shadow (starring Sharon Lawrence) and the reading of Ellen Simon's Aunt Stossie's Coming for Five Days (starring Marsha Mason and Mary Steenburgen) at the Pasadena Playhouse; the reading of Steven Drukman's *The Prince of Atlantis* for the Pacific Playwrights Festival at South Coast Repertory, Clifford Odets' Paradise Lost at Intiman Theatre; Shakespeare's Romeo and Juliet, Noel Coward's Blithe Spirit, Tennessee Williams' The Eccentricities of a Nightingale, Eugene O'Neill's Desire Under the Elms, Bernard Shaw's The Doctor's Dilemma at A Noise Within. Furious Theatre credits include the Los Angeles premieres of Craig Wright's Grace, Peter Sinn Nachtrieb's Boom and Hunter Gatherers, Bruce Norris' The Pain and the Itch, Yussef El Guindi's Back of the Throat, Richard Bean's The God Botherers, Neil LaBute's The Shape of Things, and the world premieres of Alex Jones' Canned Peaches in Syrup and Matt Pelfrey's An Impending Rupture of the Belly and No Good Deed, among others.

Upcoming directing projects: *Romeo & Juliet* by William Shakespeare at the Oregon Shakespeare Festival; *Mi Cuba* (in development) by Caridad Svich at the American Conservatory Theatre; *we, the invisibles* by Susan Soon He Stanton at the Humana Festival of New American Plays.

A Message from Artistic Director Dámaso Rodríguez

"Scientific experiments are supposed to be filled with wild imagination and help us to understand better about beautiful universe." Todor Kozlek, the Bulgarian cartographer, played by Artists Rep Resident Artist Allen Nause

Welcome to Artists Rep and to the World Premiere of E.M. Lewis' *Magellanica*. This is our 35th season. We've continuously produced 35 years of thought-provoking, challenging, daring, complex, complicated, sometimes controversial – always *emotionally resonant* – theatre experiences. This amounts to more than 250 plays and nearly 10,000 performances.

Our mission is simple, but expansive: we produce intimate, provocative theatre and provide a home for artists and audiences of varied backgrounds to take creative risks.

Since our earliest days, Artists Rep has provided Portland audiences with the very latest in new writing for the theatre. In 2014, we stepped up our commitment to a generation of new work by launching our new play development program, Table Room Stage. Led by our dramaturg, Luan Schooler, we set out to articulate the kind of work that best represented Artists Rep's values. In other words, what kinds of plays did we want to help to create? What makes a play an "Artists Rep" play? What contribution did we want to make to our community and to the literature of the American theatre? The artistic team reflected on this question, and we soon published the following:

We are interested in work that

- Stands at an angle to the world and shows us something anew
- Explores the edges, depths and heights of human experience
- Uses language with originality and vibrancy
- Embodies a muscular narrative structure and rigorous intelligence
- Offers a distinctly theatrical experience
- Has an opinion and seeks to change the conversation
- Risks failure rather than repeats formula

Which brings me to Oregon-based playwright E.M. Lewis' extraordinary, ambitious and inspiring play, *Magellanica*, which embodies all of the above values, and more.

Just over a year ago, I was sent a copy of this five-part, five-hour epic and was riveted. Like a novel that draws you into its world to such a degree that you cancel plans or rush home to finish, *Magellanica* was captivating. I read on and off all day. I canceled plans. I began to share the script with members of the staff and resident artists whose voices were in my head as I read the script. "I think I've come across something special. What do you think? Am I crazy?" I was relieved as my colleagues responded similarly. The play was vital, urgent, finely crafted and deeply personal.

But how would we even produce a five-hour play? Logistics aside, I was confident that audiences would be as captivated as I was, but producing *Magellanica* would force us to modify every aspect of our process at Artists Rep to make it happen. We'd have to rehearse it for twice as long as most productions, and we could only perform the play four or five times per week instead of seven or eight. We'd even have to find a way to feed the audience during every performance. Not to mention E.M.'s epic vision and imagination ... the play mixes intimate drama and cinematic scale. As we considered the challenges, I looked back at our values statement... "Risks failure rather than repeats formula".

And so, we said "yes" to the extraordinary challenge and opportunity. I'm glad you've trusted us to take you on this journey. Welcome to the 1986 South Pole Winterover! Next stop, Antarctica.

Warmly, Dámaso

A Hole in the Sky

Magellanica is a fictional story with invented characters; however, it is based on factual events and real science. In 1986, when the play is set, scientists knew that there was a dangerous hole in the ozone layer and were working feverishly to confirm the cause. At the same time, other scientists were beginning to notice climate-related anomalies and growing concerned about the "greenhouse effect." Although ozone depletion and rising global temperatures are distinctly separate problems, they are both results of mankind's actions. *Magellanica* is set in this historical moment when we first began to realize how extensively our choices were changing the planet.

What is the ozone layer?

Oxygen molecules (O₂) have two oxygen atoms. When either UV rays from the sun or electrical discharges such as lightning strike an O₂ molecule, it can separate the two atoms. These single atoms can then bond with an oxygen molecule, creating a new molecule that has three oxygen atoms: ozone (O₃). This natural process of producing ozone is reversible, so although it is constantly being created and destroyed, the amount of ozone remains stable. Ozone molecules are most concentrated in the stratosphere (the atmospheric layer roughly 631 miles above the earth's surface) but even there, the amounts are miniscule: only about 0.00004%. (Oxygen makes up about 21%, and nitrogen 78%, of the atmosphere.) Nonetheless, even at such low concentration, ozone provides a vital service to life on earth by absorbing the sun's lethal UV rays.

What is the 'hole' in the ozone layer?

Scientists began measuring the amount of ozone above Antarctica in 1957, and levels stayed relatively stable at around 300 Dobson Units (DU) for the next decade. However, beginning in the 1970s, scientists observed a regular loss of ozone in September/October of each year – a loss that increased year by year. In October 1979, the lowest level measured was 225 DU; by 1994, the level fell to 92 DU, a loss of 70% from what had been measured in the 1960s. The 'hole' where the loss is greatest covered an area of 1.09 million square kilometers in 1979, growing to 29.46 million square kilometers in 2006. (For comparison, the entire land mass of North America is 25.3 million square kilometers.)

What causes it?

In 1974, scientists demonstrated that chlorofluorocarbons (CFCs) are able to catalytically break down ozone in the presence of high frequency UV light. CFCs were created in 1928, as non-toxic, non-flammable refrigerants, and were widely used in refrigeration, air conditioning, aerosol sprays, and plastic foams. At peak, about a million tons of CFCs were produced each year. As very stable compounds, CFCs have a very long half life. They can remain in the atmosphere for over 100 years - only breaking down when exposed to UV rays from the sun in the stratosphere.

Why is the 'hole' over Antarctica?

The sun sets at the South Pole in April and does not return until September. With the onset of winter in Antarctica, strong westerly winds are accelerated by the increasing cold, creating a vortex over the region. This wind prevents warmer, ozone-rich air from entering the region, and as the temperature in the lower stratosphere drops to -80'C, Polar Stratospheric Clouds (PSCs) begin to form. These clouds provide the surface on which CFC-related chemical reactions occur. During the dark winter months, there is little chemical activity, but when the sun returns, the UV rays striking the clouds and CFCs cause the CFCs to breakdown, releasing chlorine gas molecules that destroy the ozone. This unique combination of wind vortex that isolates the area, super-cooled air that creates Polar Stratospheric Clouds, and CFCs – a compound not found in the natural world – works together to destroy the region's ozone layer. As the temperature rises with summer, the effect is diminished and the ozone is able to partially restore.

What are the effects?

A depleted ozone layer allows more UV rays from the sun to enter our part of the atmosphere. The increase in skin cancers and cataracts are significant, documented problems, but we know less about the effects on plant and animal life. There is, however, evidence that phytoplankton and zooplankton – the first links in the aquatic food chain – have a low tolerance to UV radiation. Damage to life at this level could have repercussions throughout our entire biological ecosystem.

What can be done?

In 1987, the Montreal Protocol, a global treaty to protect the Ozone Layer by phasing out production and consumption of CFCs and other ozone-depleting substances, was ratified by the United States and 196 other countries. The treaty was the first to achieve universal ratification by all the nations in the world and was remarkable for how quickly it came to pass with only 14 years lapsed between the discovery of CFCs' impact on ozone and the international agreement to address the problem.

It is estimated that by 2050 the hole in the sky will be healed. Like most environmental problems, it will take longer to repair than it did to create, but it demonstrates that with global, collective action, we can avert climatic disaster.



What is an Aurora?

Both of the polar lights occur when electrically charged solar particles, usually from solar winds, and atoms in the Earth's atmosphere collide with gases like oxygen and nitrogen, causing those gases to emit light. Auroras happen in ovals around the planet's two magnetic poles, which is why the farther north or south you're located (auroral zones), the more likely you are to experience one of them. In the Southern Hemisphere it's called aurora australis and in the Northern Hemisphere it's called aurora borealis. There are thousands of individual colors in the aurora, each from the movement of an atom, molecule, or iron moving from a high energy state to a lower energy state. Oxygen gives off the green and red light while nitrogen glows blue and purple.

Aurora Australis







Aurora Borealis



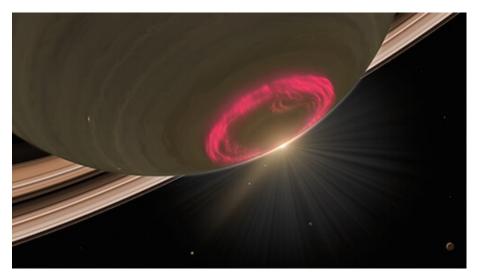




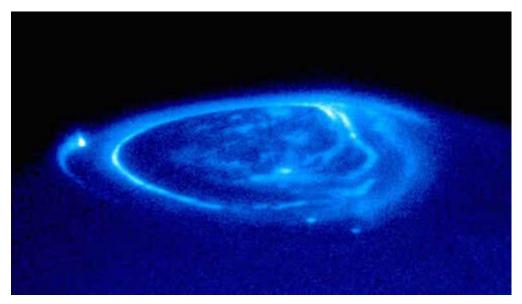
Interplanetary Aurora

Did you know there are even aurora on other planets? The same thing happens on other planets but with a different combination of gases and particles!

These swirls of red light are an aurora on the south pole of Saturn. Image courtesy of NASA/ESA/STScI/A. Schaller.



The NASA Hubble Space Telescope took this picture of an aurora on Jupiter using ultraviolet (UV) light.





Voice as Musica Universalis in Magellanica

By Mary McDonald-Lewis Resident Artist, Voice & Text Director

Magellanica lives inside a kind of dark and stormy snow globe. It opens in a small space, stuffs us into an even smaller place and then leaves us, for eight and a half months, in a cramped and cold research station in Antarctica, surrounded by thousands of miles of... nothing.

Solitude and isolation are our bedfellows here, with strangers made stranger over clashing cultures, passions, and pursuits.

Our snow globe is a tower of Babel, too. Words obscure instead of clarify, languages confuse. These trapped women and men are Russian, Ukrainian, British, American, Norwe-gian, Chinese, and "a little of this and a little of that." They are devoted to their sciences and seeking to both stay hidden, and to be found. They use more than words to tell their tales: their voices sing in their bodies, emanating from their chest or gut; are caught in their throat or spill out in wrenching confession.

As resident artist, voice and text director at Artists Rep, my job on any play is to create a spoken landscape that amplifies the inner and outer worlds of the people in it. So I begin with our speakers and their sounds much like a composer does with her score. Who is our shadowed and secret instrument, who is high and elusive? How do the voices move from chorale to cadenza and back again? How do the contrapuntal harmonies create tension, break and resolve?

With *Magellanica*, first the characters started to tell me a bit about themselves. Then Dámaso, the director, added his vision, and the actors brought their characters' back stories, inner worlds, desires and trials. From this comes our composition and our orchestra.

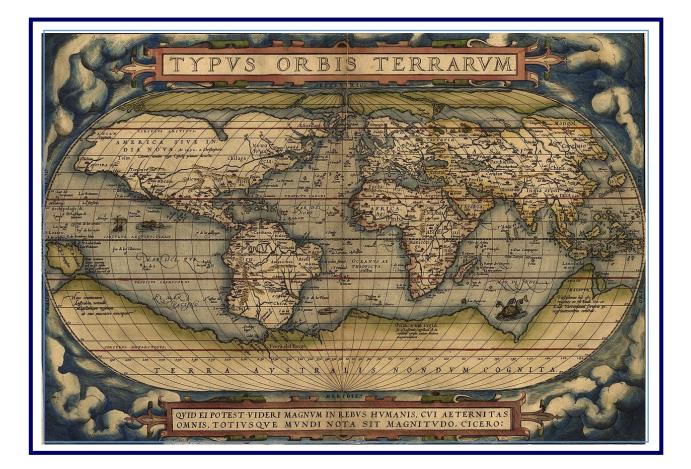
Now comes the conducting. As with our scientists in the research station, we first work alone, my actors and me. We explore the character: their heart, their scars, their virtues and sins. We let a voice emerge, slowly, that speaks to that person's soul. That is as authentic as their walk, as organic as their temper. And gently, very gently, we tend that voice, and help it grow. I bear all the characters in mind as we work, so that when each actor returns to the rehearsal hall and rejoins the story, the sound of these voices swells to a *musica universalis*. the music of the spheres — eternal, connective, balanced, true.

When I think of that little snow globe, a dim light in the vast white, it doesn't seem small, or cramped, when I recall the stories inside it. Above it is the Aurora Australis, and beyond those Southern Lights, the stars and planets whirl on and on.





Orbis Terrarum





Full Synopsis

WARNING: SPOILERS AHEAD

In the first section of Magellanica, a small group meets the people with whom they will be spending the next eight and a half months in barren Antarctica. They meet in New Zealand as the first leg of their journey to the South Pole. Antarctica promises a unique territory to study for these intrepid travelers. The year is 1985, and Cold War tensions imbue the interactions between the international crew members. Adam is an Army soldier learning how to be a leader in his new position as captain of this group of travelers. Freddie is the station handyman working to protect the crew from the dangers of the Pole. Morgan is a reserved climatologist and she is investigating the possible effects of chlorofluorocarbons on the thinning ozone layer. Vadik is a Soviet climatologist, also sent to investigate the ozone, although his country sent him to disprove the West's accusation of humans to blame. Todor is the oldest of the group, a cartographer from Bulgaria seeking to make a more precise world map. May is a young physicist from the U.S., investigating the southern lights and hoping to be the perfect scientist. William is a British glaciologist, seeking Antarctica as a means to get away from conservative society. Lars hails from Norway, coming to the South Pole station to cook for the crew in the meantime before studying penguins in the summer. The group gets to know one another as they ride a small plane to a training camp, but stormy conditions bar the plane from landing, and the company goes straight to the Pole. The blizzard intensifies the crew's fear of the unknown and Antarctica. The team adapts to the unforgiving and lonely environment of the small station at the Pole.

In Part Two, Freddie nurses Todor back to health after being unconscious for two and a half weeks. The crew adjusts to their new home and lifestyle. Adam struggles with his memories of Vietnam, coping through songwriting and love for Morgan. Lars punches William over a rude comment about May, placing previously quiet tension on public display. May and Todor begin their friendship. Todor sees her as similar to his young daughter back home, and helps to quell her anxious quest for perfection. The eight Pole dwellers work through their dependence and frustration with one another.

Next, a more intimate mood falls over the play. Morgan and Vadik quarrel over who has the right to the telescope, which spins into a discussion of similarly tense Soviet-U.S. relations. Vadik needs to give a properly conservative report back to his country for fear of the government's power. Though the two disagree over whether there might be a hole in the ozone, they make a pact to help save the world no matter what they discover. They find a sense of shared humanity in their search for truth.

As the mark of the longest night of the year approaches, the crew prepares performances for the annual mid-winter follies. This prestigious event provides most of the structure for this act. Joy and laughter are intermittent with the corps coping with their pain and loneliness. The troop gets closer to one another as they reveal more about themselves. Adam debates whether or not to let some of the team go onto the glaciers for research; outside the walls of the research center is the unwelcoming ice, an ever-present specter of death. Adam eventually gives in, despite his time in Vietnam which makes him reticent to put others' lives on the line. Those who go outside struggle in the unbearable weather. Todor dies from the inhospitable environment.

The final act of the play visits the travelers finding meaning in their time in Antarctica. Lars writes an account of the winter, and he struggles to tell the story correctly just as Morgan and Vadik attempt to tell the story of the ozone hole. May finally takes control of her life. She plans to study vast theories in physics instead of the southern lights. Todor's ghost continues to work on his beloved map, and visits his beloved May, giving the two of them closure. The team sings one of Adam's songs about Antarctica just as Freddie saves filmed interviews with the crew. These attempts to collect, save, and reproduce the winter demonstrate how staggering the winter was on these people's lives.

DISCUSSION QUESTIONS

- What questions do you still have about the play? These can be anything from points of confusion to questions about certain choices made by the director, dramaturg or members of the production's artistic team. They could also be questions related to issues that the play tackles such as content and themes.
- How did you perceive the characters' relationships with one another in the play? Did you find yourself connecting with any of the characters?
- What do you predict will occur after the conclusion of the play?
 What did you think about the ending of the play?
- Would you ever take a trip to Antarctica? If so, what appeals to you about such a trip?
- How do you feel about the experience of watching a play of such length? Did you have different expectations?
- Why do you think the issue of human-caused climate change is so controversial in some political circles?