

*A team game filled with
chance, strategy, and chaos*

PANGEAN INVASION

CLASSIFIED

For World Leader:
Matter of Critical Importance

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EXPLORER'S JOURNAL

Commissioned to
Lt. Ernest Hemmingway
by the Bureau of Interstellar Research

14 Augustus, 2904

Aerth's post-Grand War exploration party is lost. I am the sole survivor. The Pathogen Empire, adopting the Communal System that almost destroyed Aerth, has spread throughout the universe. Their final obstacle is Aerth. Included is the Pathogen War Guide, to be immediately delivered to the Aerth World Leaders.

Fungi Troops of the 16th Battallion:

To complete the Supreme Leader's goal of the United Pathogen Empire, all planets with life forms beneath our own must be eradicated. You, the Fungi Army, are sent to eradicate Aerth.

Your Objective is to earn, by contamination through the use of pathogens, 25 World Points in Aerth. If 25 World Points are gained, then Aerth and its humans die. If the humans kill all the Fungi, leaving not a single Fungus left on the planet, then Aerth has defeated the Empire and is to be evacuated at once.

The following pages will detail the Methods of War that dictate how Aerth is to be won and how it is defended.

The War is fought between two teams, the pathogen team and the human team.

Game Pieces

Pathogen Army

Fungi (F type): Green dice

- The base troops of the Pathogen Army. These units do not move, but spawn all other pathogens.



Bacterial (B type): Yellow dice.

- Bacteria move slowly by "clustering" and are the lowest ranking pathogens.



Viral (V type): Blue dice

- Moves quickly with the wind across both land and sea.



Prionic (P type): Red dice

- Moves are directed by a player, but seeks humans. Highest-ranking pathogen beside fungi.



Recoverable Contamination Blocks: Grey blocks

- Show where pathogens contaminated a country and can be decontaminated by humans



Non-recoverable Contamination Blocks: Black blocks

- Show where a nuke struck and cannot be decontaminated by humans



Human Defense

World Leader (WL): Round White blocks (with nuke on top)

- Leaders of the humans; WLs control troops from cities. WLs and their troops have color-matching indicators below them.



Electro-biohazard Eradicator (EE): Blue blocks

- These human troops, controlled by a WL, attack pathogens.



Field Hospital (FH): White blocks

- Controlled by a WL, FHs decontaminate countries and can block (contain) pathogens.



Molecular Epidemiologists (ME): Orange blocks

- These troops, not controlled by WLs but can reside in a WL's city, research anti-pathogen blocks.



Anti-Pathogen Blocks: Green, Yellow, Blue, and Red blocks

- Researched by MEs and placed under human troops, these blocks give an advantage to humans fighting pathogens.



Mechanisms of War

6-sided Placement Die:

- Used for placing troopos randomly in countries, and for FH decontamination.



12-sided Research Die:

- MEs use this die for researching anti-pathogen blocks.



8-sided Placement Die:

- Used for placing troops in cities.



Percentage Die:

- Determines if a pathogen survives a nuke.



10-sided Placement Die:

- Used for placement of troops randomly in countries.



6-sided Battle Die:

- Used for battles, each team has specific colored dice. Pathogens use the black/red dice, and the humans use the blue/white dice.



Game Board

- A map of Aerth, divided into countries numbered 1-52, with arrows showing wind directions and marked cities 1-8.

Special Action Cards:

- Give an advantage (or disadvantage) to players on both teams. Red cards are pathogen cards, while green cards are human cards.



Team Composition

Before the game starts, players split into two teams, the Pathogen team and the Human team.

- There must be at least two players total (one for each team), and up to 6 players on the Human team and 4 players on the Pathogen team (10 in total). Teams do not have to be even.
- Each player on the Pathogen team controls all the units of one or more pathogen type.
- Each player on the Human team is at least one WL (in control of all the troops under the WL) OR all the MEs. Players can control more than one WL.
- Players can consult with his/her own team when making decisions, but are not controlled by their team.

Turns

Turn Mechanics

The war is fought as a turn-based game. Each turn consists of a placement part and a movement/attacking part. The first turn sets up the game board and begins the War.

Game Setup (First Turn Placement)

Before teams set up, the special action cards are shuffled and placed in decks next to or on the gameboard.

The Pathogen team sets up first:

- 5 level-one (one dot on the die is on top, see Pathogen Levels) fungi are placed randomly by the person in charge of the fungi.
- Do not place two fungi in the same country (reroll the placement dice if you roll the same number).
- The fungi each spawn one pathogen at level one (see Fungi Spawn).



Five of these fungi, which spawn a pathogen each, are placed on the gameboard.

To find a random location on the gameboard, roll a 6-sided placement die and the 10-sided placement die.

- The 10-sided die corresponds to the ones place of the random digit. The 6-sided die corresponds to the tens place, with a 6 being rerolled.
- Because the highest numbered country is 52, a roll of 53 or higher requires the ones (ten-sided) die to be rerolled.



The random location found was 16, so the fungus is placed on the country with numbered 16.

The Human team places next:

- The 8 die is rolled to place the 5 WLs in 5 different cities (if same number, reroll).
- WLs are placed with their color-matching two EEs and one FH in a city.
- Three MEs are placed on the remaining three cities.
- To finish placement, the player in charge of MEs does research to gain and place anti-pathogen blocks (see Anti-Pathogen Research).



A city containing a WL and its troops.



A completely set-up gameboard, ready for the move and attack part of the first turn.

First Turn Move and Attack

The Pathogen team moves and attacks first:

- The player controlling the Bacterium goes first, followed by the Viral, followed by the Prion.
- Each player does his/her own individual turn.
- At the start of his/her turn, each player draws a special action card.
- Players then move and attack.

The Human team then moves and attacks:

- Each World Leader does their individual turn in order of the numbered cities (lowest numbered city first, etc.).
- Players take a special action card at the start of their turn.
- After that, players move and attack.

Moving and attacking are further explained in later pages.

Subsequent Turns

Every turn after the first turn comprises of a placement stage and a move/attack stage.

Placement:

1. All pathogens on the game board increase their level by one (see Pathogen Levels).
2. Pathogens randomly place a fungus on the gameboard. Fungi are always placed: there is no max amount of fungi on the gameboard except for the amount of fungi pieces in the game set.
3. All fungi spawn a pathogen each.

4. Humans place next, putting a new ME in a city with a WL, with a maximum of 5 MEs on the gameboard and 2 MEs with one WL.
5. One FH and one EE is placed at each WL's city, with a maximum of 2 FHs and 2 MEs total.
6. The player in charge of the MEs performs research to gain and place Anti-Pathogen blocks (see Anti-Pathogen Research).

Move/Attack:

- Follows placement. Same procedure as the first turn move and attack.

Fungi Spawn

At the beginning of each turn, the fungi spawn pathogens

Every fungus spawns a level-1 (see XXX) pathogen, with the one on the green die facing up.

The player in charge of the fungi rolls the 6-sided placement die for each fungi:

- A 1 or 2 spawns a bacterium:



- A 3 or 4 spawns a virus:



- A 5 or 6 spawns a prion:



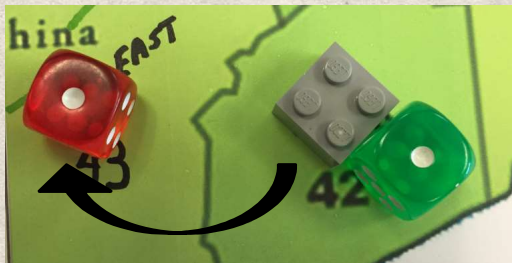
The player places the spawned pathogens next to the fungi that spawned them



Contamination

The goal of the pathogen team is to contaminate countries on the gameboard. Pathogens contaminate countries only on their movement/attack turn, when they move out of a country.

- No contamination occurs when a pathogen moves through a country (a block is only placed after a pathogen's first move out of a country during a turn)
- A grey contamination block is placed in the country where the pathogen previously was.



- Because Fungi do not move, they cannot contaminate any countries.
- Each contamination block on the gameboard counts as one World Point for the pathogens.

Pathogens contaminate cities separately to the countries they are in.

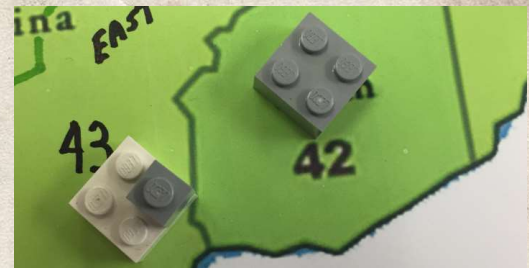
- If a country containing a city is contaminated, the Human team must decontaminate the country during their next turn.
- If not decontaminated, the city dies and all the troops on the city, including the WL, die and are removed from the gameboard. A grey contamination block is placed on the city.



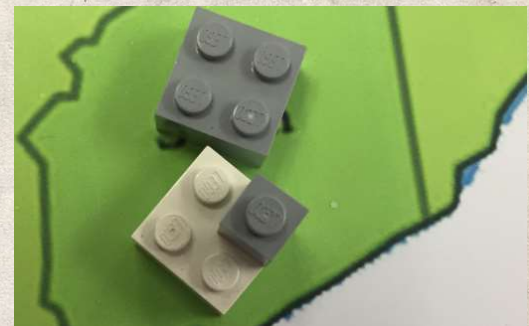
This city's country was not decontaminated in time, so the city died.

Humans can decontaminate grey-blocked countries during their movement/attack turn by fighting the contamination with a Field Hospital.

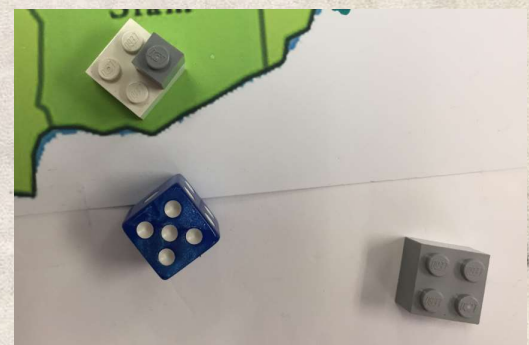
- No pathogens can be present on a country for decontamination to occur.



- When a FH moves into a contaminated country with no pathogens, it attacks the contamination with a die roll.



- The World Leader in control of the FH calls high (4-6) or low (1-3) to a six-sided die roll, then rolls the six-sided placement die. If called correctly, the grey contamination block is removed



- If called incorrectly, the FH stays in the contaminated country and contamination is not removed

Contaminated cities may be decontaminated, but cannot be used as a human city anymore (humans cannot produce and place new troops on the city).

Pathogen Movement

Each pathogen moves in a specific way through the gameboard.

- Fungi do not move.
- Bacteria move through one country per turn (but can choose not to move) by clustering
- Bacteria clusters by moving through and contaminating all the countries around the spawn location before moving one more country away from the original location.

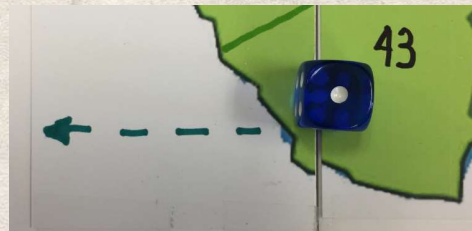


A bacterium clusters from its starting position.

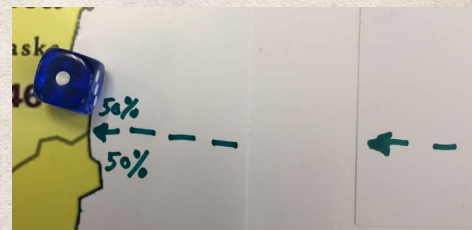
- Viral pathogens are driven by the wind, in the direction of the arrows on the game board
- Viral pathogens can move through a maximum of two countries per turn



- They can also move across water following the arrows on the gameboard, but one space across water counts as two moves



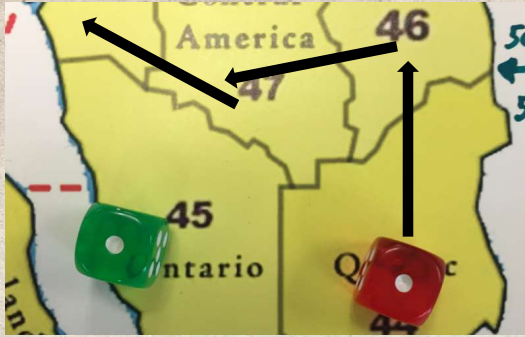
Moving across water uses two moves, and occurs in the direction of the arrows.



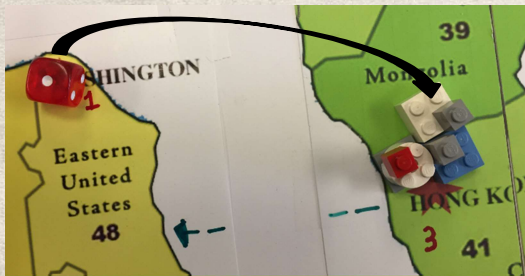
When there is a 50% chance of going into either country, the 6-sided placement die is rolled. A high roll (4 and above) means go to north, and a low roll means go to the south.

- Viral pathogens **MUST** move at least one space (including across water) on each turn

- Prion pathogens can move a maximum of three spaces per turn (or choose not to move).



- They can travel city-to-city (from a city with no humans left on it, to any other city) but that move counts as moving two spaces.



- If a human troop is one country away, the prion will seek the human, moving in to attack the human if moves are available. If no moves available and the human does not move, then during the next turn the prion will attack the human.



Pathogens move in order from bacteria to viral to prion. The player controlling each pathogen type moves all their pathogens in order from east to west on the gameboard

Human Movement

Different human troops move in different ways:

- WLs and MEs do not move
- Each Field Hospital can move 1 space per turn
- EEs can move up to 2 spaces per turn each



Different human troops move a different amount of moves per turn

- Humans can also fly city-to-city, using one move
- No human can move across the ocean, except when flying city-to-city
- All human troops can choose not to move
- Humans can move through contaminated countries

Humans move in order of WLs: the player controlling the WL in the lowest number city moves ALL their troops before the WL in the next lowest number city moves his/her troops.

Tip: If a city looks to be lost, the troops in that city (except the WL) can evacuate out of that city to another city. On the other hand, if a city needs to be saved, troops can be brought in from another city.

Battles

A troop, when moved into a country occupied by an opposing troop, attacks the opposing troop in a battle

- Troops cannot move through a country with an opposite troop, and must attack the unit there.
- If multiple opposing troops occupy one country, then each attack only battles one troop, with additional attacks costing a move each.
- If a unit moves into a country on its last move, it can attack one opposite troop there.



The prion will use three moves to attack all three human troops in this city.

A troop always attacks multiple enemies from the lowest rank:

- Pathogens rank in order from (lowest-level) bacteria, to viral, to prion, to fungi
- Humans rank from EEs, to FHs, to MEs, to WLs.

An attack creates a battle, which is a dice roll:

- The players rolling the dice are the players responsible for the troop/pathogen in the battle
- The highest-numbered roll from each team decides the outcome: the higher number between them is the winner
- The losing troop dies and is removed from the gameboard.



In this battle, the 6 from the humans beats the 4 from the pathogens

An attacking unit (the unit moving into the sector with the opposing unit) gets three dice to roll, while defending units have only two dice, with exceptions:

- FHs, cities, and fungi defend with three dice while the attacker gets two.
- Prion pathogens attack with one more die than usual
- Prion pathogens defend with the usual amount of dice, but lose one point off of the highest roll (if two or more dice roll the same highest numbers, then only one die loses a point)



In the left picture, the defending prion's score is 5, not 6. In the right picture, only one of the 4s becomes a 3, so the score is 4.

In case of ties, the defending troop always wins.



The human defense wins this battle and the attacking pathogen dies.

Fungi and World Leaders, not being able to move, cannot attack and always defend in battles

If a World Leader dies, but the matching troops are still alive, the player in charge of the WL is still in control of them and moves and attacks with them, though no additional troops are placed at the start of turns for that WL

When all the troops of a WL and the WL die, the player in control of that WL does not do anything anymore

Pathogen Levels

All pathogens are at a level from 1-6

- The level is shown by the number facing up on the pathogen die
- All pathogens spawn at level 1
- Each additional level increases the amount of dice used in a battle by one



This prion, attacking with four dice at level one, will now attack with five dice

- Pathogen levels are increased, by flipping the pathogen die so that the next number is facing up, by one at the beginning of a turn, or with special actions cards.

Tip: Levels get out of hand quickly and it soon becomes impossible to successfully attack pathogens, so try to kill pathogens when they are still at low levels.



This prion will attack with 9 dice!

Anti-Pathogen Research

Human anti-pathogen research is done by the player in control of the MEs, to earn an advantage against pathogens during battles

During the placement part of a turn, the player rolls the 12-sided die to earn research points (points correspond to the number on the die) for each ME in play. The player uses research points to gain anti-pathogen blocks.

- 4 points are used for an anti-fungal block (green block)
- 6 points are used for an anti-bacterial block (yellow block)
- 8 points are used for an anti-viral block (blue block)
- 10 points are used for an anti-prion block (red block)

The player can pick which blocks are gained for a given die roll, but **MUST** use points to gain a block if possible.

- An insufficient number of points to buy a block **OR** points left over after gaining blocks add to the roll at the next ME.

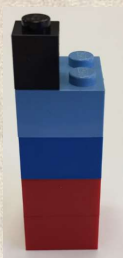
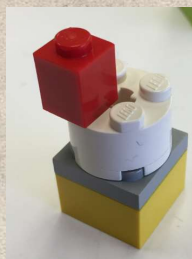
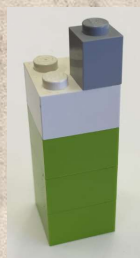


The roll on the left has insufficient points to gain blocks so 3 points will be added to the next ME's roll on that turn. The roll on the right will have points left over that transfer to the next ME on that turn.

- Extra points and insufficient points to gain a block at the last ME are not carried over to the next turn.

Tip: You must buy an anti-pathogen block if possible, but what type is not stated. For example, if you need an anti-prion block but rolled 9 points and have more APs to roll at, you can buy a green block and have 5 points left over for the next roll.

Blocks are placed below all troops, and multiple blocks can be stacked on a single troop:



Each anti-pathogen block on a troop gives an extra die to roll during battles, against the pathogen that the block is for (red block gives one more die against prion, etc.).

Tip: Stack specific anti-pathogen blocks on troops depending on where they are on the gameboard.

Special Action Cards

Special action cards give advantages (or disadvantages) to players during their turns:

- Each player takes one card at the beginning of their individual turn, and shows it to everybody.
- Some cards must be played immediately, others can be held on to (a player can choose not to use the card, and keep it for another turn).
- A player cannot have more than one card at a time, so if a player hold on to a card, the player will not draw a card the next turn.
- Humans can share a card by giving it to another player.
- If player has a card already, another player cannot share a card with him/her.
- Pathogens cannot share cards.
- If a player on the human team is in charge of the MEs and no city, he/she cannot draw cards, but cards can be shared with the player.

Human cards:

- Options: Add an extra 1 space to a move of any troop, OR add one point to any die roll (attack, defense, research).
- Berserker: Add 4 points to an attack or defense roll, but only to one predetermined die. Roll can exceed six with this card.

- Breakthrough: Add an extra die to an attack roll.
- Lucky Day: Take another move. This is a full move, as if you did not move the troop (with this card, an EE can move 2 extra spaces, ME one space).
- Recover a Contaminate: Remove a contamination block from a country with no pathogens. This card can only be used with a FH (when the FH occupies a contaminated country, the WL in charge of that FH can use the card).
- Research Anti-Pathogens: Only used by AP researcher, this card gives the researcher a research roll (with the 12-sided die). Costs of Anti-Pathogen blocks are stated on the card (different cards have different costs).
- 4 Different Anti-Pathogen Cards: One for each type of pathogen, this card gives an anti-pathogen block for the type of pathogen stated on the card. Used by the researcher.
- Armageddon: Requires immediate use. Player who gets this card rolls an 8-sided die to determine which city gets accidentally nuked (see nukes for more details).

Tip: The berserker card can help defeat a high-level pathogen, because a score greater than a 6 automatically wins the battle. Hold on to that card for difficult battles, for example attacking a high-level fungi.

Pathogen cards:

- Outbreak: Gives an extra die to roll during attacks.
- Evolve: The player flips one of his/her pathogens to the next level.
- Spurt: same as Evolve.
- Energizing: Used immediately. Discard card (nothing happens).

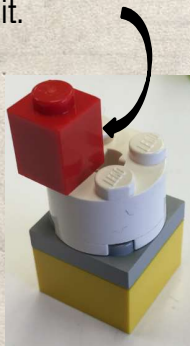
- Split: Any pathogen (including those not in the player's control) splits into two pathogens of the same level as the original pathogen.

Tip: The Split pathogen card is very powerful, as the player who gets it can use it on ANY pathogen. This includes fungi.

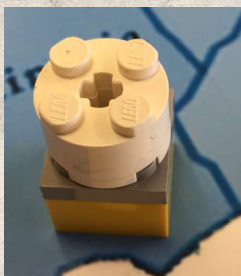
Nukes

Humans have a special attack move consisting of a nuke. Pathogens do not have nukes.

Each World Leader has one nuke, shown by the nuke marker on the WL unit.



- A nuke is used by a WL on his/her turn.
- Only one nuke can be used per turn (only one WL can use a nuke per human turn).
- The nuke is used on one country of the WL's choice.
- After using a nuke, the nuke marker on the WL unit that used the nuke is taken off:



- Nukes are also used when an Armageddon special action card is drawn, though this does not use the WL's nuke (nuke marker remains on WL).

A nuke causes non-recoverable contamination, and a black contamination block is placed on a nuked country or city:



- Both humans and pathogens can move through black-contaminated sectors
- Black blocks cannot be recovered, and the country nuked is lost to the humans, but each block counts as one World Point for the pathogen team.

Results of a Nuke:

Nukes kill all humans in the country nuked.

Pathogens have a percentage of being killed:

- Level-I fungi and bacterial pathogens have a 100% death rate.
- Level-I viral pathogens have a 90% death rate.
- Level-I prion have an 80% death rate.

A die roll (explained on next page) determines if a pathogen dies to a nuke.

To determine if a pathogen dies to a nuke, the player in charge of the pathogen rolls the percentage die. To survive the nuke, the player must roll higher than the death rate (for example, 90% or 100% for a level-1 prion to survive).

- Each additional level that a pathogen is at lowers the death rate by 10% (a level 2 fungi has a 90% death rate, etc.).



A level-2 prion pathogen has a 70% death rate. The player rolled a 60%, so the prion dies.

- If a fungus is nuked, its level drops by one for each 10% past the death rate, losing 1 level if player rolls the death rate (for example, if a level-4 fungus, with a 70% death rate, rolls a 50%, the fungus drops by three levels to level-1).
- If the fungus loses more levels than it has (for example, if the player rolls a 30% for a fungus at level 2, which has a 90% death rate and would mean a 7 level drop) then the fungi dies.



A level-2 fungi pathogen has a 90% death rate. The player rolled a 80%, meaning a loss of two levels. The fungi cannot be at level 0, so it dies.

Common Game Strategies

The humans have developed several tactics for use against pathogens:

- The Lars Maneuver: WLs attack with every troop they have. Either ends in a big win, or a quick loss.
- Blitz Attack: humans attack only fungi, ignoring all other pathogens. Useful if other pathogens spread out.
- Fortified Defense: Cities are heavily fortified with troops laden with anti-pathogen blocks. Good to use if pathogens attack the city and lose all units in the process, but do not ignore city and contaminate countries.
- Nuke Containment: a WL uses one nuke every turn to (hopefully) kill a fungus. This, as long as the fungus dies to the nuke, is very useful, as it keeps the fungi from increasing and becoming impossible to defeat.
- The Kleczek Strategy: A WL uses half of his/her troops to attack pathogens (preferably fungi), keeping the other half in reserve to prevent a defenseless city.

The pathogens also use several strategies:

- Slow Death: Pathogens do not attack humans, instead focusing on contamination. This forces the humans to attack (remember that in ties, which occur frequently, the defense always wins).
- Stay and Spawn: Spawned pathogens stay and fortify their fungus's country, gathering in number until able to overwhelm the human forces and win the war.

Winning the Game

The game ends when either:

- The pathogens have scored 25 World Points. The pathogens win the game when this occurs
- The humans have killed all the fungi on their turn, so no fungi remain on the gameboard at one time. With no fungi left, the humans win.



Keep in mind the tips I shared throughout the pages, taken from a pamphlet showing how the humans may overcome the pathogens. Unfortunately, that pamphlet has been burned to a crisp by the Supreme Leader, but I have been able to salvage some parts and include them here.

I have no more time left to add anything more; this should be enough. I send these instructions to Aerth with hope that they come in time and are not seized by the Empire.

It is too late for me, but I dearly hope that that the humans will win, or freedom in the universe, for everyone but the pathogens, is lost forever.