

At about 6 pm

On the 6th of August 1935 Dr Rife and I prepared a hanging block preparation of *Cryptosporidia* on Immers media. Upon examination of slide under about 1800X we found a few separated hyphae which upon examination on the 7th of August 1935 had developed into a series of typical fungoid development which continued to grow into a mass covering the entire block of media upon examination at 8 pm on August the 8th 1935 the growth had extended beyond the block of media and on the under side of the cover slip which greatly enhances the observation and definition of the growth - the hyphae in this area shows budding form of a decided rapid growth these buds extending on stems from the main branch of the hyphae the buds are spherical and contain a mass of highly active material as these buds gradually develop

This document accessed at www.rife.org
Perhaps the drying up
of the fluid slows down the motion.

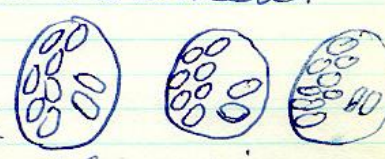
The movement increases until the granules within them have formed into ~~en~~ elongated masses decidedly resembling bacilli. They then lose their capsule and remain as non motil groups of bacilli at the end of the small stem - appearing to be in some cases like bunches of bananas.

Dr Johnston arrived at 10pm to observe the development. On observation at 10 am on Aug 9th 1935

we observed the following. The main channels seem to be filling up with dark spots from which emanate the budding forms which ^(are on tiny stems) are ~~round~~ spherical and contain the highly active particles which resemble bacilli ^{and} which are about twice as long as they are wide and slightly curved - after agitation the capsule appears to dissolve, leaving the small forms free, tho ~~the~~ ^{some} remaining together. Small branches appear on the surface of the hypha and push what appears to be the outer skin of the hypha ahead of the growth. This skin may form the capsule - Suggested by Dr Johnston (continued)

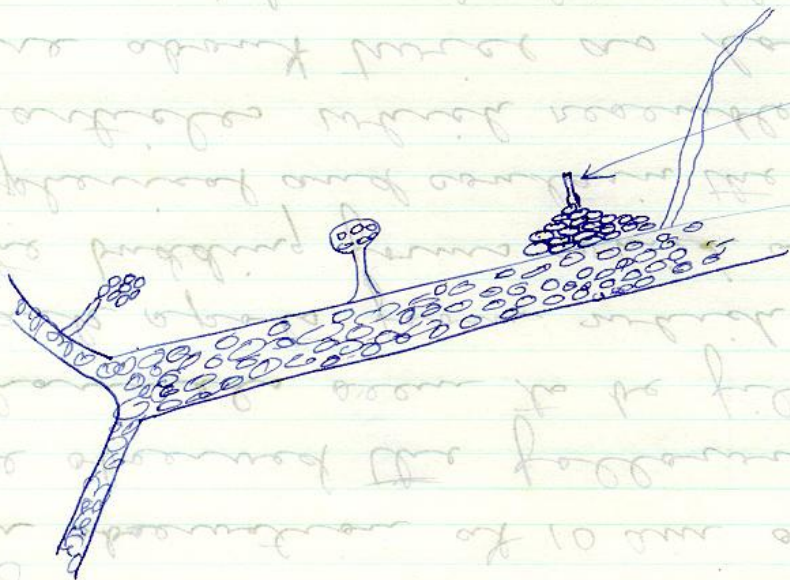
Aug 10th Growth continues to
 " 11th become more dense
 " 12th buds forming in different
 planes -

Aug 13th note - two buds with separate
 stems seem to have merged one
 bud seems to ~~have~~ ^{becoming} detached its
~~self~~ entirely from ~~the~~ its stem -

Aug 13th 1935 Dr Ernest Walker
 Hooper Foundation of San Francisco.
 Arrived this morning and observed
 among other things the movement
 of the bacilli in the buds
 this movement lasted about 
 1 hour - The bacilli are ^{changing} position.
 bean shaped and are ^{slightly} flexible at the
 ends bending on contact with each
 other - movement slows down as capsule evaporates

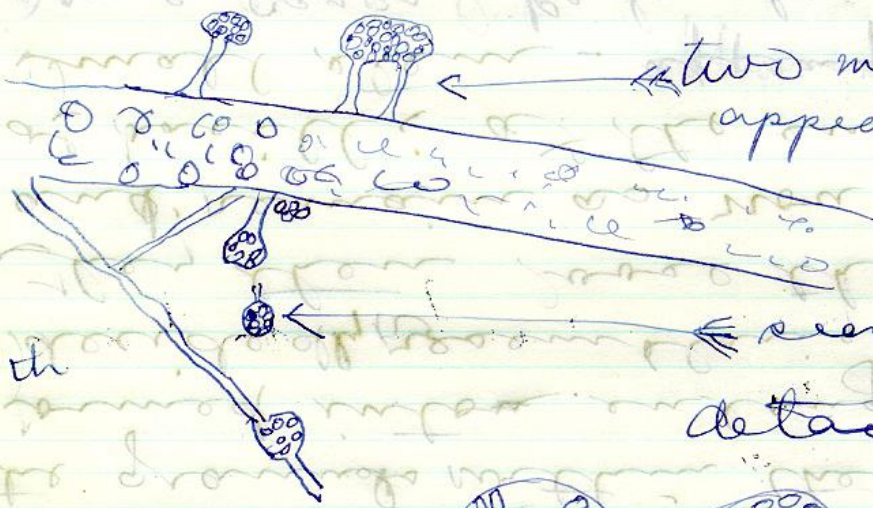
Aug 14 This morning noted that one
 of the stems had shed its bacilli
 they laying at the base of the stem
 against the hyphae in a pyramid the
 stem standing up thru the center of the
 group. The bacilli seem to be joining
 the group in the hyphae.

Aug 14th



stem standing after looking after bacilli

Aug 13th



two merging or appearing to merge

seems to ~~have~~ become detached



showing movement of bacilli in capsule

Aug 15 - Hypha with stem
and pedestal and granules forming



Swelling forming outer
skin of capsule

Saw Capsule forming

Aug - 16 -

Dr Walker made a slide of BX taken from
petri dish containing BX on one side and unknown
barouse tumor culture on the other side - on
observing under the microscope many ~~BX~~ ^{Bannans} were seen
having motility the Ray was applied and
motility stopped / it was noted after ^{movement} ~~movement~~
stopped that several ~~had organelles~~ ^{Bannans} had tails

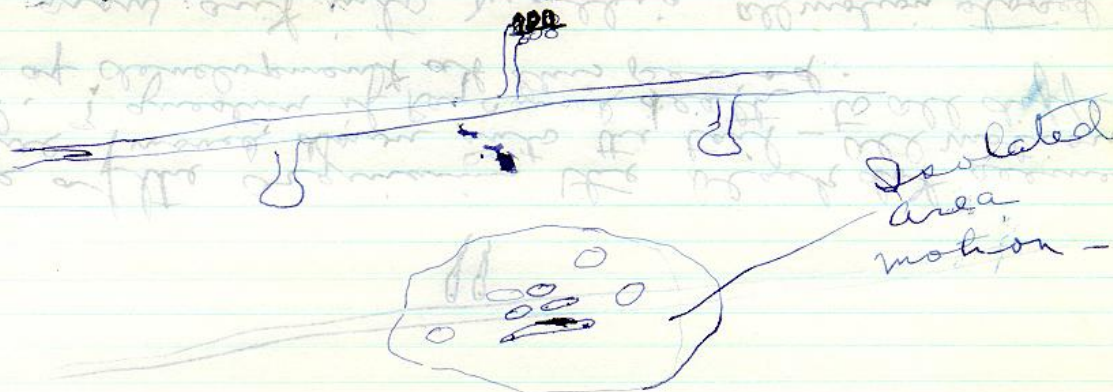
||

In one of the organelles the black dot seemed
to have moved down into the tail - all motion
stopped. ? question if Ray caused death to all different
stages of development at this period.

Spores grow out into millbia all motion stopped -

10³⁰ PM Aug 16 Evidently due to
the use of the ray close to the slide
all life and motion has stopped -
over

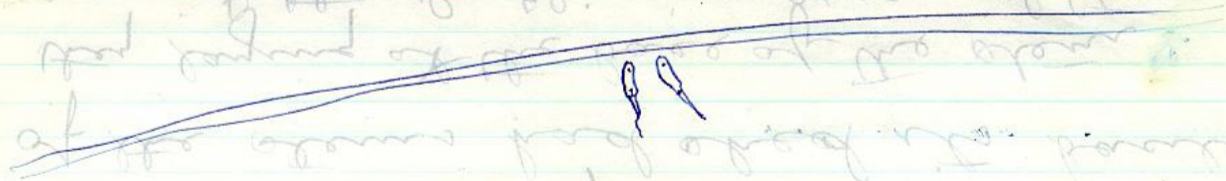
Aug 16 - 9:30 motion has started
in isolated area which is separated
from any connection with mass -



Aug. 17th Dr. Zobel visited the
laboratory with Dr. Walker and observed
the movement of the banana-shaped bacilli.
Dr. Rife explained to Dr. Zobel the
advantage of studying the angles
of reflection in lighting the field
of the microscope he was delighted
with the information he received -

Aug 19th Hanging block destroyed
new one to be made tomorrow -
new type of bacilli - segmented
each segment has individual granules -
elongated hyphae -

Aug 16 After Ray applied to BX slide
tails noted on banana shaped organism



Argon tube, vacuum water bath - K medium
Gruener's media - Tyrode solution - Gram's stain - Gram's stain - Gram's stain
culture of crypto nitros - culture of BX - Helium tube -

Aug. 19. Transfer from Petri dish to test tube of Gruener's media
~~for~~ Dr Walker's observation -

A slide was prepared from culture from BX petri dish in normal saline solution. Dr Walker observed the appearance of hyphal ^{with granules -} and broken rods, ^{these} seemed to be a thorn like process branching from the middle of the point of one of the granules.

(Dr Johnson) These granules seemingly formed by the junction of two of the barman's ^{shaped organic} which bear polar granules which seem to fuse, the line of demarcation between the barman's seems to ~~develop~~ disappear and the granules ~~develop~~ coalesce at this point is where the sporogonium seems to branch -

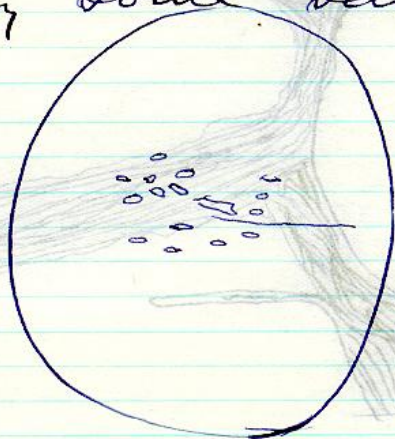
(Dr Johnson suggested a guest book to be signed by every one that visits Laboratory -)

Aug 20th No change in morphology but increase of mass of slide prepared yesterday -

Aug 21st. Dr Walker being satisfied that he understands each step of the operation of the BX culture is returning to San Francisco to repeat the experiment at the Hooper foundation. We are giving ~~him~~ him

Hanging Block No 2.

Aug 20 1935 - ^{9:45 am} - Dr Rife prepared new hanging block using a small block of Gunders media and culture BX ^{in saline solution} from petri dish containing BX and ? upon examination ^{high} block slide shows a few hyphae, few short and broken filaments apparently some bean-shaped organisms.



looking thru media

Aug 20th

10 am growth seems to have started 15 min after slide prepared -

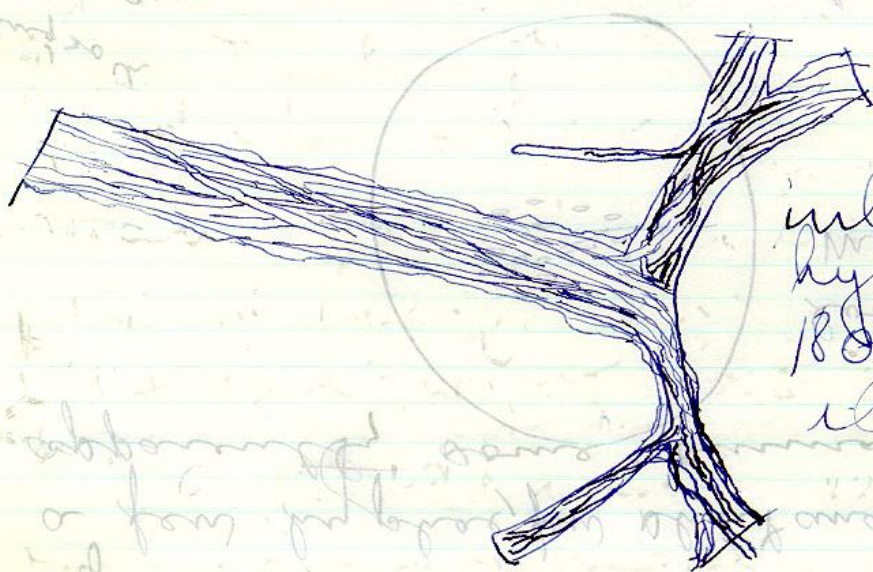
Aug 21

Growth continues and has traveled out from the media on to the cover glass giving a clear vision of all stages -

Aug 22 -

Dr Rife prepared the double illumination ^{at 1800x} and upon examination found (over)

the detail greatly increased and gave very definite knowledge as to construction of Hyphae, tho very difficult to explain ~~construction~~ except to say that it has appearance of long strings of roots of trees interlaced serrated at the edges. Different layers and planes observed distinctly -



interlaced
hyphae under
1800X double
illumination -

Aug 29-35 - new type of bacilli noted today, segmented.

Sept 1st - growth continues as usual tho media is drying out and will watch for latent fog moisture to disappear -
Sept 16th growth seems about there -