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July 1939
Influenza A epidemic

Aug 39
Identity of Montana and Queensland A strains

Nov 39
Influenza epidemic in Pennsylvania

Dec 39
Intranasal method for foetal inoculation in mice

Jan 40
Genetic interpretation of A (H1N1) strain

Feb 40
Prevalence of A (H1N1) strain

Mar 40
Higher rate of A (H1N1) strain in avian and mammalian hosts

April 40
Pneumonia expl.

May 40
Normal cases at A (H1N1) strain and normal avian method

June 40
Started raising antiserum with live attenuated strain

July 40
Allergic method of inoculation by needle developed

Aug 40
Antibodies in sera of monkeys

Sept 40
Blood responses to influenza A and B

Oct 40
Tests revealed third phenomenon

Nov 40
N.D.V. antibody resembles influenza

Dec 40
Antibodies in sera of cells, alone

Feb 41
Field test on nursing mothers

Mar 41
Agglutination of RBCs by vaccine

April 41
Deaths caused third reaction

May 41
Influenza A epidemic in camp; recognition of B phase

Sept 41
Influenza skin test

Nov 41
Tryptic stain test

Dec 41
Human Newcastle disease

April 42
Sera of Newcastle disease [1/20] and [1/50] does not react

June 42
With A and B strains. Yolk sac susceptible to 0

Sept 42
Inhibition of N.D. by 1/50

Vaccinia crassus, virulent in field

Nov 42
Certain cells only of cell line are susceptible

Jan 44
Pandemol vaccine strain

April 44
M.F. antigens in O phase

Feb 44
Recognition of C-D intermediates

Mass production of vaccine started
Monthly Summaries collated from MRC logs.

August 1st 1939.

For two months including illness and medical absence — and absence of this kind.

General: received news that work had been accepted by Cambridge Press.

Production of antibody is in progress as monograph. Jackson egg.

Papers on VIA to BJ Exp. RML. Rabbit X and Q confirmed.

Potombe in some further investigations by Jackson show superiority of man over MV.

and cynomolgus over rabbits. Several more cynomolgus deaths after inoculation with

vaccinological findings. Paper will be ready.

VIA: Agent is regularly obtained with perfectly clean gauge. Agent is almost

completely destroyed by boiling for 10 minutes. Action less evident against

egg strain than against mouse few and percentage was found to be low.

VIA acts on the lumpy seed weeds B.

Test on vaccinia footpox echidna pseudotumor pseudocardia myxomatosis.

Comparison of other visceral agents found.

FeI: Frock Edward Hyde. R. egg Yac. 1HT

Sedan 1.5 subcutaneously + + + + + + +

Epinephrine 0.1 + + + + + +

Lampe sulfate 0.1 + +

Cetyl benzoate 0.1 + +

H2O2 1:100 + + + + + + +

VIA + + + + + + + + + + + +

These cain soluble and egg albumin all shown to be high in Erysiphe and no

action on flour.

Attempts at chemical study under way. Preliminary papers to England.
May 1935. Rhabdoviruses grown on C.A.
June. C.16 plaque photographed by Bannard.
July. N.D.V. grown in embryo.
Aug. Plaque-macular agent obtained from embryo macerated by mm serum.
Sept. Plaque grown in embryo.
Oct. Plaque difference Bovine NDV + P. PS.

1936.
March. Torscular rhombola and Capping ill grown.
April. Foresky's strain not grown.

1936. 1st fatal counting exps with capping 1st.
Aug. - keeping all record for 1st counting exps.
Sept. Probiotics found in Australian parents.
       Serological differentiation of Staph. pyogenes.

Jan 1935. Survey of small parents for probiotics.
Feb. - keeping all passage to 30 lbs of rats.
Mar. Use of 120 eggs for C.A. work.
April. Rhabdoviruses - isolated (NV) by C.A. method.
May. Neutralization test shows evidence of subclinical W.T.
     and low grade shown (Mr) isolated.

           First biological exps with W.T neutralization.
           Isolation of strain Bells, influenza A9.

Aug. C.A. passage of buff shows definite survival & for.
           A B dissolution of ultrastr. toxin.
           Federal probiotics outlined.
           Specific pneumonia in mice with penicillins.
           Evidence for immune-resistance seven in serum-virus
           neutralization (the virus).
Nov. PXP: nephritis virus grown on C.A.
       Rush flows human illness.
       Kappa.
Dec 1936. A Pox nephritis found in mice.
July 1939.

Influenza A epidemic.


Dec 1939.

Subnasal method for pseudococci in mice.

Jan 1940.

Antigen inoculation failed.

Feb 1940.

Inoculation of B (egg) for guinea pigs.

April 1940.

High rate of recovery in guinea pigs all failed.

Aug 1940.

Prominent capi.

Sept 1940.

Natural cases at Q.V.N. isolated virus by amm. method.

May 1940.

Started testing volunteers with attenuated strains.

Feb 1941.

Attenuation method of inoculation by needle developed.

Apr 1941.

Death pneumonia in cyno monkeys.

May 1941.

Good response to influenza B i.n.v.

Oct 1941.

Tests showed of viral phenomenon.

Nov 1941.

N.D.V. closely resembles influenza.

Dec 1941.

Effect of N.D. in removing reactivity of cells to itself alone.

Feb 1942.

Gougeberg test on Army volunteers.

Jan 1942.

Agglutination of RBCs by vaccine.

Feb 1942.

Years without that reaction.

May 1942.

Influenza A epidemic in camp: recognition of O phage.

Sept 1942.

Influenza skin test.

Nov 1942.

Hayes skin test.

Dec 1942.

Human Newcastle disease.

April 1943.


June 1943.

A and B rotations. MacNeal susceptible to O.

Sept 1943.

Production of N.D. by L.S.

Nov 1943.

Human subharmonic suspension with fat.

Jan 1944.

Certain cells only of subharmonic partially saturated.

Bunyan Lectures Harvard.

April 1944.

M.E.S. agglutinates in O type.

Sept 1944.

Recognition of O-D intermediates.

Mass production of vaccine started.
Aug 1.1939

Influenza: Typical flu epidemic from beginning of June till middle of July apparently
severing most of Australia. Material obtained from acute outbreak 13.6.39 at
Bundanoon Naval Hospital and from a number of other individuals.

Four of 7 attempts gave pure pathogenic virus and strain Bundanoon is
now well established in mice.

Attempts at primary mouse and egg co-cultivation failed.

Preliminary analysis of killed sera against mouse strains yields no
Bundanoon virus, except one strain has structure A, B, C, D, E, F, G, H, I.

Practically all cases so far tested show high titer of M.E.F. antibody

Two Bundanoon contacts without clinical cases showed rise of similar degree.

No amino acid uptake attempted.

M.E.F. at present time produces no mouse lesions with 10^3 egg fluid.

Mouse pneumonia

Phage continued. Real smears are obtained at 3 days and may show
enormous numbers of coccal bodies. In 5 passages 90% of lesions
were obtained and lung is otherwise of low virulence.

Appearances now resemble pseudomonas closely in Kotzernia smear.

But smears are suggested line is still possible a pleuropneumonia like organism.

Culture on Denkner medium negative.

Tissue culture at 3d interval positive but no clear organisms visible
in smears. Eosinophilia is readily spun down 30' at 10000 rpm.
X. natalis x rubellus

Brain much more active than Q in nearly all respects. Mouse spleen heavily infected and good agglutinating emission prepared. If guinea pigs receive a large dose they die of overwhelming infection with rubbing every part yet a subcutaneous infection will protect completely.

Both guinea pigs and rabbits are infected more severely by Q than by Q and full evidence of infection was obtained.

Comparative agglutination of X and Q rubbing emissions shows no difference with any type of serum.

X produces good egg membrane lesions in 3 days.

Roto on 53 eggs 2 passages at 7th interspace & rest of chicks brain being made on Mondays.

[International: General indication that war was expected about beginning of Sept or at least extreme military blackmail as last year: Russian feel highly reassured - military mission went: U.S. cancellation of gap commercial treaty: White adult 4 books on tropical & colonial medicine re in German journals]
Sept 1st 1959.

General: Figure proofs of books received. Tentative arrangements to date.

Rudd next year, letters from Ruddox. Trip to dental congress.

Other notes: Some paper finished again another positive finding except

with apparent entry right up. Suspected virus infection by entrapment

with recollection of virus from abdominal sympaties.

Suspect more MR gave virus in vaccine.

Eliminating idea that endemic polio is a lesion like infection of the nasopharynx

or intestinal tract.

Egg tests negative.

V.R.A. Chemical work indicates definitely that substance is a protein not different.

also coagulated with incomplete by alcohol completely by urine.

Moderate amount in floor of mouth saliva & Bile in faradic. Salivary

V.R.A. has no selective effect on nerves.

Influenza: Adams Holland & E.W. almost up to satisfactory mouse pathogenesis.

Pundora gave first sera E A structure in 1st and 2nd gen but 2

further mice in mouse round. Also AB quality. Further flavus being examined.

Pundora mouse strain will differ sharply from others since it is neutralized

by early round serum which has no action on M.M.F.

Pundora patients all gave a good rise in antibody and a large portion

of those exposed who did not have flu also showed antibody rise. Those with

the very highest initial values did not show a rise.

Institute staff sera not quite completed but shows a very much smaller

proportion of subclinical infection and a closer correlation of susceptibility with

low antibody rise.
Passage continued with no obvious increase in virulence. B. trace staining of background bodies very fine. T. p. (Troph.?) not pathogenic for rats.

X and Q

Another proved rather worse? X lab infection

\[ Q = X \times 10^{-6} \text{ MLA Gp} = 9 \times 2\text{ Gp} \]

In guinea pigs x active 10^9 - 10^10, no reaction no immunity.

Egg passage can be continued without difficulty but with no improvement in virulence.

Neutralization tests on egg virus: no effect whatever with rabbit guinea pig

+ hard core virus.

The experiment suggests x not killed by 0.5% formalin overnight at 37°C.

Immunology:

Guinea pig calf showed no excess of psoramin in lungs of immunized pigs.

Expt on rabbitly to be started under way. Two guinea pigs death spleen will be examined.

International: At moment [1934] European war seems less than 24 hours off - may have started. H. 16 points just published - German-Soviet pact ratified + military mission spoken off. British fleet fully mobilized. Agent should be in position of Italy + Japan although general impression is that German-Soviet pact will prevent Japanese activity here.

There seems to be no clear idea of what Australia could have to do.
October 2nd 1929

Poliomyelitis. Only 1/4 positive in experimental inoculation. Vero was isolated from human vagus + sympathetic. First 3 papers published.

General paper with climax of nature of change of virus in recent years being urged. No poly antibody in FMB. Dr. +

Affirmative.

Recent antibodies completed without essential change from findings obtained previous month. The importance of subclinical flu in basic immune for poly antibody

C.F. tests with Bordenca indicate sharply that the neutralizing & C.F. antibodies are unrelated. Two tests with no antibody shows also rising

but not closely related to either

A spontaneously infected febrile has reached high W.B.C. indicating existence of a third type in recent epidemic.

V.I.A. Further chemical work indicates a lysozyme also protein not pH by

4th and 70° and soluble in acid alcohol. Lysozyme activity of preparation

has so far paralleled V.I.A. activity apparently indicating that normal lysozyme

differed from others in having the additional V.I. form. There is a sharp

loss of power on dilution and new method of obtaining dilute preparatives against

a 20 standard coat of virus is being tried out. Some further work on D.C.

shows a very sharp threshold dilution.

Breakfast discontinued.

X. A total of 16 infections. Holmes, Cruickshon, Crawford, Bryce 3 clinical

detected as occurring during June, July, August. Presumably by X and

as far as can be seen probably by dust resp. infection from guinea pigs.
Egg passage continued at 5-day intervals without much improvement.

From immunity, some minimal reduction in test dose: virus tests indicate that neutralization was marked but incomplete and unrelated to size of dose.

Virus immunity experiment final results for dog. Antibiotic immunity showed just significant effect of nonspecific training in virus publication.

General

To further word about tools: Antibody production monograph in hands of further after much trouble with design of Institute crest. General sense of uncertainty ongoing to war and feeling that virus research in the lab is nearly exhausted. Vague possibility that something growing on egg from measles encephalitis. Have suggested virus collaboration in child health experiment in Adelaide Hills.

International: War with Germany started on my 40th birthday. Poland wiped out in 3 weeks with Russians collaborating and already introducing communism throughout eastern Poland. Peace move by Hitler expected followed by intensive aerial attack on Britain when regarded. As yet no major West Front activities. Russian move problematical but indication that 9th and eastern Europe to be partitioned between too, Baltic states going to Russia, Estonia already gone. America firmly neutral, Japan and axis, clearly Italy also they do keep neutral at least until Western powers are obviously defeated. Australian treaty position appears to be one of moral support at present: many tales of military and governmental incompetence going around.
October 31st 1939.

Soro General paper to MJA. A few more experiments with virus from peripheral nerves. One if melée immune to 1:10 dilution. To egyptoques obtained.

Influenza: Papers on recent epidemic completed as to MJA.

VIR: Standard method of evaluation is now to use 1/2 dilutions against 1:1000 HFS virus. Considerable differences in individuals found by this method.

Enzyme work has given very irregular results. A major difficulty is to be sure that neutralisation occurs is specific to active preparation has radical hypoglycemic but correlation in individual DCE + SLS are even sharper in limiting dilution than VIR.

Some evidence that a SLS-resistant strain of MRF is developing.

Egg passage has so continued satisfactorily 15th passage in guineapigs worked. On 7th egg numerous inclusions in smear.

Formal material seems to be highly infective (?). Final draft of paper suggests would like doing a fairly elaborate study of immunity etc.

General: Still working unsatisfactorily and rather hard pressed to find suitable problems for study. Have got a good start on article for Oxford Medicine with attempt to get general classification of nurses. Note from Cambridge Univ Press no date of publication possible. Mrs. Hughes to have next walk. Hugh + Williams back.

International: No major activities during month. Russian position still uncertain. General impression that economic warfare only is likely until the spring next year. No personal contact with military activities yet.
Dec 2nd 1959.

Rickettsia: can exist cause apparent multiplication of host in buccal mucosa & elsewhere of human embryo. Failure shown to occur even after 11th.

Influenza: compound expl showing non-pathogenic mixture of virus & virus completely fails to immuno-protective types to 18th-19th. Resolution and Reappearance qualities of MEF virus in embryo nearly finished.

Very rapidly inactivated at RT.

VI A. Very little further work done on VI A but indicating progression towards effect of protein in the challenging period. Sharp difference between MEF and MEF-Ratten apparently much more apparent. Evidence of resistance very marked now.

Egg passage almost lost. Restarted series using 9th eggs. Histology of different ages is going to be interesting with non-virulent infection of superficial cells only.

Detailed experiments show absolutely no effect of immune serum on the egg. Rickettsia is sensitive to SI & but not apparently dissolved.

Stool story: a new human case apparently infected by simply eating a baked potato. Serological reaction of mouse goes fatal pneumonia with brain both & blood. May be worth using as an experimental method.

EX 2 (contd.)

International: German magnetic mine offensive, continued with heavy losses on both sides. Novel use of German submarines by Deutschland. British retaliation by seizure of German exports estimated to exclude neutrals. Russian invasion of Finland has just commenced. Still no major army or air activity in West.

Jan 9th 1942

Influenza: Acute infection with some observances though not others. Results in great multiplication in lung and high count in amniotic fluid. May be a method for the study of C.C. and other respiratory tissues.

Keeping reft. Shows steady fall ergometric in the chest.

Suffering from bronchitis, feel strong and not able except kept by amphetamine


X. Paper on X-ray presented in M.S.A. Received Genrich's paper on haematogenous infections. Neutralization of basic leads of necessity to new components. Killed at 6a. Histology on egg nearly completed.

S. Chick with pneumococcus which shows much haematogenous infection.

S. Chick and egg passage and mouse lung passage both going well

The evidence of neutralization by human sera on egg or by 1/20 in mice

Using dilutions in mice which will definite countable lung flora

General: Proofs of Book 1 to 112 received. Oxford People finalized and M.S. to Ward who is responsible. Miss Freeman probably going abroad with A.S.H. While CHK on Friday have been asked as army consultant on bacteriological matters. Hemingway and Selma Howard
reactions.

International: Turkish resistance to Russians was generally very successful. Gul from Svishtov damaged in fight and captured at Mostar. Air fight over Stara Zagora app. favoured Germany, no West front activity.

Polska Adria. Off coast & shelled some, some distant congreagation previous week.


Furniture Sold. Shaved only for 1st grade Rainbow shop.

Feb 1, 1940

Influenza: Annular vacuolations of unadapted thymus all successful and were.

Egg passage: Bursa seems to have been good. Transplantation on possible control of pathogen & virus.

Surface active agents: Eosin seen active at very high dilution 0.00270 on Bacter. Some irregularities e.g. DOC most active on derm. vacuolae making a good few repetitions still necessary.

Action of 815 on splenocytes is apparently similar to what of revers and still series of immunity needs noted. Egg passage practically completed.

Photos taken - Egg emission can be prepared from 9d eggs.

Pallacos is hung by useful in showing what to aim passive or elameter.

Oment effect can be demonstrated in mice.
General: is a very fruitful month. Family at San Remo for fortnight.

Both proofs to p. 208. Antibody monograph held up for the moment.

Proof of one influenza paper for Adelaide. Read started with Miss Freeman
for A&H has left town dept. Applicants being interviewed.

Dan: Isis still holding their own but much Russian air bombing and fear that
collapse likely soon. West front matter: Germans seem to have relative
superiority in air over North Sea. General impression that war in near
east is likely soon.

February 3rd 1940.

Influenza: Unadapted viral strains grow in embryo lung with
adherent histological remains. Blackeys usually rotted in most instances.
Tracheal fluid smears give a good index of conditions but there may
be snags in its interpretation. The good smear shows interesting
ultrastructural pathology suggesting ultrastructural microcolonies of virus.

Surface active agents

Series of deals with DDC and Napron competed the vessels
showing a sharp differentiation of available viruses into Napron
sensitive - Napron insensitive. A series for typing ill pseudoboles
B and Newcastle B. Pyocyanic actinomycosis facies vibrania
with a 3rd group insensitive to all C. Pseudomas + plages.

Paper practically ready for typing.

Rickettsiae

4 and 9 grown on the egg are much more potent for growth
than the number of rickettsiae present would justify. Action of 5x8
is not quite straightforward as a small enough dose is needed by S.C.

The methods of infecting bovines are still completely uncertain.

Preliminary data from the first cases as a rule progress and it seems unlikely that immunity & this route will be possible.

General. The first cases as a rule progress and it seems unlikely that immunity & this route will be possible.

Some of the early cases were only moderately successful. A

This Harris is a professor of pathology at the University and is working in the department for the writer. C.H.V. obtained F.E. final proof edit of book and of antibody monograph passed.

Preliminary data in M.T.A., published as the present:

We are still waiting for final confirmation which has been broken and Vosey

in danger. West point machine. Early cases of British - neutral shipping

remains on board a British - neutral vessel. Australian troops in

Palestine. U.S. envoy Welles in Europe doubtful of significance. In one

case we know what type of this spread. Notice that there is a fairly

influential upper class peace group in England, including Sir W. H.

March 3rd 1940.

Influence. Harris technique was standardized. All monos and fats stains go well.

Some also. bad & used for titration and serum neutralization though with

some reservations. Harris paraffin material burn in one prep was neutralized

in nice. Noted not in egg.

Method for dealing with trachy - band fiend by

eutrophilic sinophylactic relatives gives excellent results. Vaccines with fimbriae

monocytes constantly present in epithelial cells. In early phases necrosis

alone and early red cells in fragmenting nuclei.

Vaccination m.c. seems to have worked completely lastly n.p.pecifically.
Surface active agents: Paper compacted and would cloud down. There is some correlation between cosmetic and invulnerable activity.

X and A Rickhaise: Detailed dilutions of x grew on egg and in mouse spleen show much greater virulence for egg and approximately the same end point as judged by emunination.

Another strain I from Turkish grown on 9d egg. Experiments underway to see whether antibody responsible for difference.

Porcine: Some eggs unvaccinated ammunated show being lesions

Modification of CA technique: Very marked improvement in neurones by acting slow down gently with a drop of saline on the site in skull menembran.

General: Rudd still with pneumonia was convalescent. Miss Foley starting on some plague work but not very impressed. Miss Paris making a useful assistant.

Paper for RACP. on possibilities of emunination in face of pandemic next week.

International: Flandal capitulated and is now organizing this year's Olympic Games! The west front activity and a relative cool in sea and air war. Some attempts by British to stop the traffic from Scandinavia to Germany. War in middle east seems less likely. Berlin raid had no outward result.

May 1st 1940.

Influenza: The dysentery strains have taken well by amanotic route.

Neutralization experiments fail almost completely with AP material by amanotic route though they behave normally in mice with same virulence.

With continued passage fevert strains appear to be increasing markedly in general virulence with apparent diminution in frequency of pararenchmal emulsion.
Both mouse and egg inoculation appears to develop viral amniotic passage particularly for 5th day. M.E.P. produces only interstitial lesions not epithelial ones. But same strain is still infectious for fetal nasal washings at 5 days being infectious for 6th.

Two attempts at common cold negative.

I.M.T. still quite negative. Allantoic fluid contains highest concentration of virus for some intervals at least.

Poliovirus

5/8 new eyes done after pharyngeal inoculation, new ser. under test.

Radiation infections

Williams taking over most of work. He achieves by amniotic route. Attempts to show that antibody responsible for mouse results not successful. The added that treatment of new-born with antibody to serum results lead to acceleration of the disease in new-born. Fruits to analyze this commenced.

Very small dose of carbamylated vaccine given severe reaction in humans.

Polio virus: some good positive amniotic results, but irregular and mostly in the epidermis of the grafted bunches.

Photodynamic action

From Fari's using capes virus rapidly inactivated and virus appears to be a remnant of almost inactivated material just capable of producing foci particularly at the edge of the membrane.

Diagnosis: hypereutrophic dystrophy

From. They working up phages on UV-W-Z smooth stocks to specific S. phages yet isolated.

Attempt to isolate virus from Rabaul influenza enzootic. Annual report written
internationally.

German invasion of Denmark + Norway. British force in Norway being pretty
badly hammered at present. General indication that they will now try
with rear movement. Temporary British naval advantage in Iceland.

May 21st 1940.

Influenza. Infections show anemic point highest when atlantic and final
regulation. Attempt at rosy-decay not promising.

Changes with passage vessel in increased rapidity of death particularly
with high deficiencies. 1st passage material at high deficiencies produces
chronic unregressing lesions. There is a moderate increase in pathogenicity
for mice + C A with anemic passage.

Sniffles show specific lesions in upper respiratory passage as well as lower.

Power of adapted strains to immunity mice and also keeping properties
of 1st p. anemic + atlantic fluids is being tested.

Note: after intranasal infection definitely positive results obtained.

709. 7th P. Subdural g. r. = new + 9d. 11 section

711. 12th P. Pharyngeal l. o. (area) + 3d. + section

Another batch of monkeys on way.

Paulacoris: need completing immunological work.
Redcliffs, 111 in Williams hands now. Truncus typhosus from Capakana is apparently taking in guinea pigs after egg passage. Time of persistence of virus in guinea pigs under various conditions being investigated.

Page 1 has today been obtained one or two specific S types plagues but no actually type specific forms.

General: Arranged to collaborate with C.G.R. on mouse plague work. After being asked if willing to act on Army Consultative C. wasn't invited. Williams to move out to Broadmeadow next week. Rudd functionally excluded as pathologist for 8th Dist.

International: Blitzing started on May 13th. British troops withdraw from Norway. German fast captured. Holland and Belgium capitulated after 5-10 days. These British E.F. surrounded and at present attempting to evacuate from Dunkirk. Italy expected to join Germany next week. breach of Japanese total invasion of England.

July 1st 1940

Influenza: Hyperacetylation a failure: 1st passage material has a relatively high emerufen powers for mice. S. typhosum fluid keeps very well in refrigerator. Attempt to grow Packaging Respiratory virus a failure. Streptococcus attempts add.

Wells mask + rubber also negative. M.M.F. apparently gives low grade non-fatal lesions. With 20 mm passages Mass is not highly active.

M.R.F. can be isolated by death but gives no new findings, there is a high level of rum fluid containing with low titers by C.A. W.R. however behaves normally. When an active virus is mixed with immune serum although there is very little reduction in infectivity there is a marked protection.
against actual effect.

11\textsuperscript{1} Echinoesia. Rather irregularly produces definite infections occurring

on average and resembling in some ways enuresis.

will bleed if some cells present in its fluid with atypical infection.

possibly 3/4 down after vaccination by mouth. Subcavitations

made speed by death due to cold.

Tuberculosis. Must finalizing immunity work.

Action of M.B. Thus Paris will obtain first draft water for what seems of

outlook significance.

General. Arranged for dust to look into bacterology of engraft lungs.

Rutti to go into camp immediately - another case? infection at present.

Dealing more with studies. Compiled 2 medical papers and one on

anesthetic method. An Advisory committee for Defence Medical Services.

International

And so worse - Most of B.E.F. escaped. Paris captured, and France

capitalized completely. At present there is a full and no definite news as

to whether French fleet has surrendered or not. If what the position in

Africa is. Russia occupied Persia after Bulgaria last week.

German invasion of England expected this month: a probable Italian French

attacks on Sardinia as first step in Mediterranean. Japan probably advances to

stage French Indo China? Dutch East Indies. Hitler said to be arranging

Whitehall visit for August 15\textsuperscript{th}. German furnishes promising delivery for October.
August 5th 1940

Inference - nearly digging up free work. Two papers on amnic reactions nearly completed.

Red AP retains pathogenicity for mice. Band has apparently lost pathogenicity. A few virus has turned up in passage of a female from country case but no certain evidence that it was not a contaminant. Red AP virulent for mice and retains serological character. Band AP much less active for mice.

Arrangements have been completed for test of vaccinating procedure in volunteers. N.E.F. - Run 73. E.P. - Reid 1. AP. 13+2 volunteers. will before and after bleeds.

Note: Simulations completed. Sufficient positive results from pharyngeal and mesenteric lymph node material to make useful paper.

Pathology: Paper completed.

House affection: Material from Narrandera contains fp. like organism on Achyros

Serological: Reid now in camp. Send medical papers to J. Esr. Med. No news of

General: Must leave left to get married. Must thank to replace tee.

Weekend at Bexley:

International: Well apart from air raids - successful British action in getting French
good out of action. It has much occupied in selling two orders in Europe. Japan arresting

British. But no overt action. Russia appears to be more anti English. Roosevelt nominated

for 5th term.
August 21st 1940.


Humana exp. 8 gave none slight evidence of activity of virus in 2-4 days after inoc. With R. 1-2 A.P. 3 definite cases out of 12 with one other doubtful. Virus isolated by amnestic method from 1.

Serum not yet started. Except from Aug 17th to 24th at Dr. Howells house.

Bund A.P. shows very little capacity to multiply in mice and finds to pass on in virus. Thinks enemized with a fibrous response.

Two epidemic at Puckapunyal of few type, R. did not isolated one strain by direct amnestic inoculation of feline.

Rat 2: Results from mesenteric e mod e submucosa shares one active with dilution of 1:1000 and some further promising. Preliminary draft of paper completed.

General: Two weeks at work - collecting post 1919 influenza statistics.

Rudd tech 3 person on Tuskege exp. infections - Dr. McDermott Thompson for part time collection of respiratory material. The news of book. Miss Faing lift on transfer.

International: Action air raids against England now concentrating largely on London - British driven out of Somaliland. Romania transferred Transylvania to Hungary & Dobrudja to Bulgaria. Greece likely to be attacked by Italy but so far only minor Mediterranean activity. U.S. Canada joint defense board established.
October 2nd 1940

Influenza: As usual expect to work out and preliminary write up sent to Andrews.

Any 4 of 15 Red cell antibodies 2 of these unmodified flav. 1 showed definite
complementary response to 12 antibodies. But got fever from 3rd day. I gave excellent
specific immune response to Eagle virus. Except on the whole provided an excellent basis
for further work upon indicating importance of antibody titre with certain conditions constant.

T. Hutchings: Attaching Bloods for rough test of antibody until culture to test out
and non-immune.

Two cases of true flu from D.W.H. virus isolated by amniotic method when
fluids failed. Normal antibody response; horses appear to have some W.S.
component. In both cases virus in faecal passages detected by indurant
mouse test.

These sera are relatively type specific. Young apparently more so than adult
mice.

Rudds results show one group of true influenza cases 3 live virus
isolations followed by a later group with similar symptoms and no isolation
of virus and no rise in antibody. Of Stuart Harris 1939 results.

Pathogenesis:

Arsenic passing by amniotic route with fairly regular deaths 2-3 days.

Lung edeme very rare in readiness weeks and trucked fluids are infective
for mouse lung to 10^5.


General: Note from Hors referring miscellaneous papers for Dr. ODK. read (nicky) and to

J. Brannock: Williams at Fairfield with staphyloc.
The news of bomb or of homograph. Supported idea in isolation.

International: Indiscriminate night bombing of London started on Sept 6th and has continued. Flak seems effective against day raids. Halifaxes 60 miles wide Egypt but another fall at present. Attention on Baluch and de Gaulle a piece. Japan in alliance with Axis but embattled at present. French Indo China occupied by Japs.

November 1st 1940

Influenza: About 100 convulsed bloods tested showing only about 20% with 200 antibody. Two groups under Band 90 and Rand 12 underway next for no reactions.

Homologous no reactions sera being tested.

Nothing out of more sera shows approximately equal activity on mouse egg of homologous sera from fresh and mouse and mouse sera show under specific.

Slight suggestion mouse sera better in mice.

In test Rand AP shows practically no activity in mice weakening in mice and on CA.

VIR is active against unadapted virus and a check obtained lugage in

of opposite full activity.

Very little change evident in MEF after 40 amniotic passages.

Preliminary results show the large amount of virus in foetal fluid and so

blocking effect of S.E. on antibody neutralization. Fully marked blocking

effect when Band AP and MEF together on CA.

11-1. Amniotic passage foetal fluid seems to be growing less active

sections show elimination of strains to larger foetal.
Edwardian's Amunic passage showing very like influenza — suggestion from sick sinus that at early stages of passage sinus confined to large tubes when it forms epithel without damage to muscle then giving total desorganisation with influenza 1 or 2 bodies difficult to find. More readily in older embryos.

Polymyxin's this batch of polymyxins appear very susceptible. By month all 3 inoculated going down within a day or 2 of each other. Tests of gynostro node under way. Think in 2 cases that gynostro node virus unaccelerably may immurize.

General: Ford working temporarily in the sub. Backhouse running fresh work.

Signed contract with Macmillan to books in America. Give ABW advice on names.淙mend by hammering on via coast. Mother still bad up.

International:

Bombing of London slowing down somewhat. SE defence less effective in destroying German planes. General impression that invasion has been defeated. Rumania peacefully occupied by Germany. Extensive damage to shipping by subs. + aircraft.

Greece invaded by Italy a few days ago. Egyptian campaign changing pace. ول + naval arranging Franco German 2 collaboration. Burma road reopened and apparently blocked by Japanese. Chinese claims successes?
January 15th 1941.

Influenza:

Most available real students have been tested with very small proportion of really low antibody.

Nine persons tested with Red 42 showed several with symptoms
Symptoms showed + + - antibody until
No symptoms - + + + - - -

The serum appears to allow differentiation between egg + mouse antibody.

Symptomatic monkeys show 1-2 day temperature after intratracheal inoculation and a definite antibody rise after either symptomatic nasal or symptomatic intratracheal inoculation. With H5 in a very large one.

One inoculation successful another attempt failed the next.

Horseshoed mouse chains will grow in atlantoic cavity.

Virology:

Backhouse isolated virus from intestinal mucosa. One failure
take by stomach tube. An isolation from intestinal mucosa after
intranasal inoculation. Suggested that sympathetic is the
essential mode of spread in fowl.

General:

Bone appeared 2 27th. A very good review in aquatic.

Got £24 for contribution to Oxford Chronicle.

Have a survey of influenza on hand at present up to 15th 1 1/2 flies.

Monograph ranging fine still. Have tea with Backhouse + Ford.
No caption provided.

February 27th 1941.

Influenza. An epidemic of influenza swept through the camp, affecting about 20% of personnel. Attempts to control the spread were unsuccessful. Antibiotics were used but without much success.

Eggs from monkeys were regularly used to produce virus. Each monkey was given repeated inoculations at 10-day intervals, with each injection causing a 100-fold increase in antibody titer. Each strain gave an approximate constant rise of 100% per injection.

All types of virus will grow in allantoic cavity. A simple method of inoculation by needle in unopened egg is satisfactory. Rates of growth of MMV obtained in 12th and 10th eggs. The apparent harmful effect on the embryo. Tests for antibody production in vivo are under way.

Immunity of mice after immunization with unadapted strains is not yet fully established. In mice, immunity is present only when a small dose of unimperial virus is used. Attempts to develop a V10-resistant strain are in progress. No evidence of immunity after infection with a contaminated virus has been developed so far.

Paralysis: There is a serious shortage of men obtained by inoculation of allantoic...
faced into race 10 Present position indicates what contaminant is probably not far but gives fair time changes in eggs. Nature under investigation Pure polioresis strains apparently do not give infected cells in dilu.

With high doses of polioresis strains in eggs appear to require presence of contaminant, when they are much higher than in mice. Without the contaminant only high concentrations take in eggs.

Franklin strategy:
Several representative rabbit sera available: indications are that genetic differences may be recognized. A series of yabbies appears to be one being immunized with phase C16. Those not with back vaccine 75 died.

General: First draft of influenza monograph completed and effort reported somewhat by receipt of news of influenza B from America. Have written to Francis for strains. Book has had so far uniformly good reviews in Spectator (Bartfay) Medical Press & Circular, New Statesman (Roberts) Time & Style (fair only) Medical Review Argus Paddington and Curt J. Science (Dakin) Lecture on Venus published in Curt J. Science this month.

Arranged to give 4 broadcast series in America. Miss Hancock for June 10 international: At present something of a dull before lifting campaigns. British + Austracanae compelled conquest of Eupenaeus, they active progress against Abypsinum and Italian East Africa. Magadan captured yesterday.

German peaceful invasion of Bulgaria almost complete. General feeling that invasion of Britain is not particularly likely. Japanese penetration of
Indochina - Australian troops in Malaya. Face of war seems to be shifting to a steady front of American material can continue over N. Atlantic

April 2nd 1941

Influenza: Last exp with Red as a stand only one antibody rise. Current exp with BEM 40-45 B.P. gave cross reactions so far.

The monkey given W58 + MMR died with acute pneumonia of virus type histologically. Very small amount of W58 virus recovered from lung at death (10 days after inoculation) passage under way.

A partially adapted 58 B.P. gives large proportion of deaths by subcutaneous inoculation. No antibody produced in chicks killed from eggs having Red MMR.

Further data on specificity of immunization in mice not yet through.

L.190: Resistance experiments performed at 45° for 4 hrs shows E20 or no effect on infection but very marked reduction with 119. No definite evidence yet of development of resistance but moderately effective.

Pathological observations show to be a melbourne type for which apparently introduced by Redd during CA passage. Few pathacesions are very mild. Paper on field and 1st lesions completed in first draft.

Early loss: With appropriate antitoxins sera specific for the genus Endolaccus. Eugonius and Otohace can be obtained. No trace of response to 216 antigens.

Diplocaecy: Thus such planning starting work - hope to obtain material from these groups. Idea of physiological hypersensitivity? induced from these genotypes.
April 2, 1941


International: Great progress in Cuba & Eupenavia which is now 3/4 captured. Cassowary fell reported today. Naval victory in Mediterranean. Yugoslavia signed Axis pact and then staged a change to a free British government? What happens next? American case law bill passed. German & Italian ships either being scuttled or seized by free American republics. More or less of a bill in North west. More Anglo-French friction over Portugal.

May 1st, 1941

Influenza: DSM-A.F. 2/3 with symptoms gave good 100% cure.

The other 2, no.

3 monkeys. U.S-P. passage has given another fatal infection and definite pneumonia in 2 monkeys killed early passage with intervening egg being continued.

Specificity of immunity in mice is not diminished when an intermediate dead dose of M/100 is included. In this experiment until today did not show the usual immunity against W.S.

Mix immunized simultaneously with S.S-egg fluids give very good specific immunity even with 1:100 fluid. Immunogenic capacity is maximal at 2d. At 7d immunogenic capacity is low such proportionately to virus like nature high.
Virus obtained from Francis' skin and checked serologically.

These typically amorphically possibly producing rather different cellular picture with varicella-like nucleus cells. Fluids give large hazy areas, multiplication (spike) occurs by S.R. multiplication producing turbid fluid. With characteristic cells in spun deposit. Is this sufficiently general to make this a method for primary isolation?

Presumptive indication that B & F passed in Flinders last year. Not NZ infection.

Farewell.

F.M. Moore has another 2 things which may be useful. Here Foley working on C.T. technique for pit work. Paper on Paul and 16 T currently finished. Let 16 genes for American state. Some references to tests from America.

International.

German month. German - Italian occupied Yugoslavia and Greece overrun. Hungary central and almost certain to fall up no resistance to tragic.

Australian forces in Greece mostly evacuated due probably heavy losses. Early attack on Suez forecast. British occupied by British and most of Egypt remains including Suez Canal. Increased patriot assistance by America. New recruiting campaign in Australia. Some indications of worse German fiction.
July 3rd 1941. 2 months.

Influenza: monkey influenza stays completely satisfactorily. Some fatal infections.

Histology predominant bronchitis with interstitial pneumonia. Immunity kept gave cleaned result indicating post clinical infection and live virus subcut gave good immunity; but virus eminently fit for formalized subcut. Very poor immunity. Immunity parallels antibody response.

In monkeys repeatedly vaccinated. Step-like rises of antibody with occasional mumps one monkey showed a large anti-body rise. Specificity of monkey serum is extremely marked on the egg much less so in mice. Complement fixing antibody develops in monkeys.

Influenza B. Antibody present in 2 1935-36 sera and in a fair proportion of random sera. One of the eight 1935 B sera tested for B complement fixation where activity---all remote infections? Passage has been continued in egg artificially + 2 3rd passage just been re-examined. Pne. To change in mouse pathogenically noted. The evidence that any specific differences in type of cells produced in T.E. Isolated viruses in monkeys + ferrets.

Complement fixation. All fluid is an excellent antigen. Several of the Brancas people show a rise of CF in absence of neutralizing antibody rise.

Immunization of mice with formalized mixed viruses unsatisfactory, current work on immunization with living mixed viruses (1 155 & B) in small amount subcutaneously.

Neutralization of B can be shown satisfactorily with mouse but not with egg virus.

Relative virus content and immunizing power of fluids from 9, 10, 12 day eggs.
Barshick gansan medium + mertholate have very little effect in the cold on fer in all fluid. Possibly significant for experimentation.

at various periods under investigation apparently only small differences evident.

Current respiratory infections at Peckham are no fewer common yet. Human work in areas will be tried on self.

Vacuums: Keeping quality except those slight advantage of calf lungs over egg yolk is organic range but hardly detectable.

Dye Bacillophages: Miss Kanya has completed work and obtained a preliminary set of phages which differentiate all stock strains to field strains.

General: Miss Kanya left Miss Terry Stairing this week. Miss Cameron to start in spring's time. Early active campaign against oral vaccines by A.S. But little to show for it. Morley influenza - cholesterolistic technique - method of subcellular inoculation - complement fixation - allantoic fluid - antigenic dye bacteriophage papers nearly finished. Popular for article to Health Bulletin.

Boots removed F.B.S. Holman and read to have been removed with endowments in US still exist as in USA. No indication of any perfidy yet. Probably what CHRI will go to England soon.

International: Successful German invasion of Italy in May. British attack on Erwin, meeting stiff opposition from French Algiers 'sea' almost clear of Italians.

German attack on Russia started June 22nd and appears to be progressing rapidly, especially in Baltic trouble areas. Losses reining of German bigamy.

British air offensive fly daylighted over southern France and considerable diminution in German bombing of Britain. Nellie 100,000 tons of shipping being lost each month. Food + Ragnarok increased.
Aug 1st 1941

Influenza A - inoculations to FMB & some Roman noses - no symptoms yet.

S. & B. inoculation mid & mixed virus in small dose showed very little effect.

Influenza + S. V. no effect on immunity; proven earlier; slight decrease.

Points of technique: location of anemia by using function of allantoic virus with

ca. as major guide - cancer cells clipped under claim.

Inoculation of 15 d eggs into arms given at 2 days a very distinct

irritation and diminution in amount of fluid - serum characteristic.

Established regular association of leucocytosis with subsequent N & C.

Relation between case + pork could mean for free - not for vaccinia.

Causes for determination of MEC + WSE in native worked out.

VIA: Action of heat suggests VIA is destroyed by boiling in oil but

not at acid reaction - there is still rather too much non-specific

absorption of serum in Tiss at 37°.

Hemoglobin 78.5 shows high titre urine antibody.

Purinorygel infrareds: Free small amount from Tiss but all negative.

General: Work much interrupted by no assistant between 7 & 21st.

Winter influenza paper finished - technique with Miss Harris and

growth in allantoic cavity also. Sent paper on Ecology of E. coli

to Boston - Died recently inoculated strains to Andrews. First paper

from W. Fitch, N.J., Sam Haddenbury. Some new reviews of book from US

Kellaway may be going to US + Pujol.
International: Slightly increased optimism from ability of Russians to hold Germans at Moscow for East Front fight. British continued occupation of whole of Belgian & French and Egypt during the month. American occupation of Iceland and Greenland.

Japanese peaceful occupation of Southern Indochina until American & British freezing of assets - some doubts as to how real these sanctions are. British have at least a temporary air ascendancy in the West.

October 23rd, 1941.

Influenza B. Excellent response in volunteers given 1st passage B and learning less initial antibody - no significant symptoms.

Romana volunteers show very little fall in the over year - Ruda & self.

Reimmunized 1st pass and without symptoms

All tests on ferrets' ability through negative.

Pfeffer hounds grows well in artificial period giving now lethal injections of embryo.

Rather irregular heavy infections with Pfeffer in nare lungs 1 day after non-viable influenza virus.

All current influenza stains now in CO2 refrigeration. MEF + WBE removed after 4 months shows no fall in titre.

100th passage WBE still fully virulent for ferret. slight adaptation to CA tropism. Will look into possibility of modifying this revertant.

Note: Rather less grade strain isolated from some adult case.
November 8th 1941.

Influenza: Wea passage of USM 166° AP appears to have weakened virulence for ferret. Straight action on USM 134° gen. little effect.

Another group of 30 given various dilutions of USM on mixed virus without unfavorable symptoms. Second batch not yet tested.

Mice may be infected by fine spray of USM with many fatal infections current report on uninfected strain under way.

Wet Phenomenon: Confirmed findings in regard to neutralization activity of B and ferrin etc.

Most important unpublished (yet) findings are that Fum blood is the best and phenomenon also shown by many other bloods including frog, toad, porcine, mouse, mouse, human with varying differences in activity.

Vaccinia membrane emulsion shows weak activity against few only neutralizable by immune serum. 1:32 t. sample equivalent on human PFCs.
Influenza: Australian strain has all the characteristics of an antigenically distinct strain of influenza virus. Lessons in Europe vary similarly to a fully egged-adapted influenza strain but more acute changes in cases of lethal form.

The section shows general epizootic nervous of large of influenza type others under way. Fluids of avian and domestic carriers both contain large amounts of virus after appropriate inoculation. The trace of cross-neutralization with influenza strains.

Hogan has tried some absorption experiments with inconclusive results.

General: Appointed to Transfusion Committee of R.C. and Scientific Committee of Anti-Cancer Council. American returns to Egi 30th 251 cigars total $94.13 regularly payable now 40th. Less the usual deductions.


December 31st, 1951

Influenza: B and mixed virus results in volunteers satisfactory. B particularly so. Suggestion of getting some extensive army experiments done.

Immunity of mice by spray not very impressive.

Third phenomenon used in various applications.

History: Characteristic for the virus in man engineering. First produced antibody after intranasal inoculation.
First draft of ND paper completed. Absorption experiments with fetal cells seem to indicate that viruses produce a factor not quite an aggregating agent in the case of ND. Red cells treated with ND become specifically aggregatable. By ND but not by B for reasons. Cells acted on by ND do not become gregateable suspensions when washed.

Rabbot serum active after intravenous immunization.

February 9, 1942

Influenza: Preparations made for polioglutone vaccine test on army tomorrow. Indications that keeping qualities of virus will have to be carefully studied.

Epidemic in December gave no virus on serological evidence of A or B infection. Two immunized students were infected.

First test: Vaccinia antiserum tested elaborated by Rogers preliminary paper to M.T.I.A. Not every group will give suitable RBC's for this.

Several antiserological points reversibility CP laws. CP laws to be worked out. Changed character of red cell after aggregating has been removed by serum. Not sure aggregatable by M.D.V.

Some normal fetal sera have a rather definite inhibitory effect on the virus aggregation even after heating. Preheating reduces this only slightly. Allowing for this effect M, B8, S0 and B are strictly distinct by first test with fetal sera. Also = CHR = null as before. GAT now = intermediate M + B with slight S0 component in some combinations. Preliminary experiment indicates that a more specific GAT with no M component can be obtained by treatment with M serum.
Aug. 4th 1942.

General: New edition of 'The Monograph' practically complete. No papers complete and arrangements with Arizona to publish account of death. Overhaul of D. C. in 1942 - replaced by Miss Powell. Miss Blake working on dust collection. Consulted by Army about typhoid inoculation procedure. If this new effort is promising may be allowed much more extensive Army communicable disease work.

Williams Burridge: Contemplating running a respiratory disease team in New York Institute Labs.

Last week from Kuala Lumpur at Breadbakers for jungle animal work.

International: Big changes in East & Middle East with entry of Japan & USA into war. Successive under Russian offensive with very extensive gains including Kovel, roost. Escape of East years' Polish campaign with Germans now returning toward front. But considerable Polish successes in early stage. Hints of active Middle East attack by Axis soon. In Pacific, Singapore expected to fall in a week or two. Philippines still resisting, Java practically occupied by Japs, Borneo occupied, and Rambel taken.

In Australia much military activity with large American forces apparently arriving. Airmen being conscripted for labour service.

Aug. 29th 1942.

Influenza: Army cases 107 infected 1st & 2nd weeks 130 symptoms of one and on another complained of, probably about 30 genuine. More worse. Second cases taken today. taxi rest same material showed B virus.

Keeping qualities under test. Supposing seems to improve keeping power at C.T. and small amounts of formalin maintain eggshell well. Conditions not yet fully worked out.

To get better and fewer any possibilities.
Feb 28th 1942

Influenza: CAT problem now appears as the separation from our CAT
which has & CAT + M + B antigenic components of a variant very
close to B though possibly with 501 component as well.

Furnasville D.V. mouse egg passage being continued.

General: Preparations for the move speed up by inability to obtain sterilizing
oven - attempts to obtain from Army not hopeful. All other arrangements
necessary packing done. Williams will probably not be available
suggested to board old windows & remove from new building and
replaced by fibre. with small composition windows. Army got not much
further forward - shov probably would results before authorizing anything
furnasville paper accepted by Quebec - the monograph complete

Pilatus ordered now: may arrive relatively soon

International. Singapore fell on 17th. Japs now very close to Rangoon
which has been evacuated. Invasion of Java apparently now commencing.
After heavy air raids. Darwin boiled heavily. Sumatra Sumatra and
Bali occupied. Philippine resistance in Bataan Peninsula continues but
otherwise all E. P. occupied with minor exceptions. apart from Java.

Steady influx of Americans into Australia.

Rushed indefinite Russian successes including a German army encircled
near Smugrad. Little activity in Burma. Increasing British ships
losses and general sense of British predicament growing.
Preliminary tests confirmed: about 20% of B responds 31% to W.

Results unsatisfactory but probably correlate with W. The correlation between antibody rise and occurrence of symptoms may partly correlate: symptoms were produced in a few.

CAT story now looks like a B contaminant.

Necrobacillus nor mac passage not very much evidence of any increase.

Recent RT tests give quite good results + quicker than refrigeration.

General

P and Ranna were depleted on March 25th; now running in.

Two of F.R.5 on March 26th: extensive fire raids. Fallen from C7/K0 with approach from Harvard via Bain of Race, just before 6:00.

Americans guns 2 area raids. Branson Johnson does dinner.

Also met Hayman, Walden, and in California, authorized influence on locally supplied VADs and sterilizing gear. Made contact with Tuck, Lashey who suggests dengue research is needed. Keogh + Miss Freeman both. Have offered Miss Freeman to Brownlee to come this week.

Authority from Board to replace windows and substitute do other ARP work.

A.S.W. Conference - subsequent difficulty with E.B.R.

The monograph galley proofs completed in record time.

International: Java taken within 10 days: severe attack on naval deft.

Since then little activity north of Australia except from air raids.

Darwin port almost obliterated in 1st raid. Very good progress Permai with loss of Rangoon +: app. recent destruction of Bulim air station.

Miss in charge in Australia + N.Z. More Americans arriving.

Russians making very little progress now. + photo suffering heavy losses.

Little in Burma but very heavy air raids on Malaya.
May 1st 1942.

Influenza: The epidemic continued with 397 new cases. Several cases confirmed in mice which showed close correlation with Belgian measles + virus.

WS, B & C keep well. MRF poorly without much evidence of additional sufffer being visible.

R. Beds find swine contain active agent as measured by intrab test showing higher vaculting power than serum against US. There is evidence no antibody is visible against W.S. subalbinoence.

Antibody against vacuain demonstrated in recently neculated subjects.

Dengue: Bloods received from N. France. Some apparent lesions in eggs were not definite being a proportion of inflammatory exudates in the EBS.

Some of these rather sparse choroidotic spots + some marked anaemia in all groups there are a majority of 75% results.

General: Army influence averted for all Victorian troops voluntary basis to start September 12th. Williams + Frew to carry out.

CHK returned 1st week. ARP work in building completed. 2nd organised. Place running fully well end VAOC not too satisfactory.

Week-end to Woodend. Army railroading conference. Americans take over new RMT.

International: Main activity in Burma where Japanese recently captured by Japs. Aeroduty over North Australia almost equally matched with recent American machines now operating. No increased activity in Russia yet. Libya no near threat still being bombed and harassing. Heavy R.A.F. raids on Nebel. + Redoubt. Repulse on both sides, Yabu.
Influenza: In 1942, there was an epidemic in camps. Backbreaking work in April caused first 3 weeks of May to be very busy. Type readily contained by ampicillin treatments but a proportion of cases in need of rest. Chest x-rays showed in 3rd and 4th week tests. First test on ampicillin primary fluids showed regular differential activity on 24. cases as contrasted with few. Epidemic rapidly waned and was over by end of May.

Vaccination campaign carried out during height of epidemic. No unfortunate incidents and no evidence either of activation of virus into epidemic form or any undue severe side reactions. Initial figures available suggest that there was actually very little immunizing effect on reduction in dosage for moderate in proportion of URTIs. Contact groups in the US gave Cape and Verdelight but these were instituted after the peak of the epidemic had passed.

Student volunteers are being tested with influenza B. vaccine to determine with what consistency virus can be deactivated in 2 days after mutation. So far responses have been poor.

Study of the processes by which the virus becomes adapted to growth in chick embryo under way; sometimes it is possible to maintain unadapted strain for several passages; others break down immediately.

Tests precipitate found in cold carry down more than 90% of virus and precipitate equal amount of agglutinin. Possible means of concentration.

Miss proudly has extensive series of RBC species tests against different viruses. B has widest range of susceptible red cells.
June 30th 1942 con't

Rus critic: Passage failed to give anything definite as also some various attempts with chick embryo guinea material. Like experimenting with RCRC technique.


Jagger thinking up vaccine story both calf and egg yolk give essentially similar degree of antibody rise. First egg passage material gave rather low proportion of take.

General: Went to Queensland June 5th to deliver Bancroft Lecture and John Thomson lecture (representing past & present). Both went reasonably well but Dr. Pitt had to leave. Wagner & Agee. St. M. Donald. Fewer.


Parks English. Bowers gave lecture to service post graduates at School of WP Med. Two cheques left received for American royalties. Several Americans of Johns Hopkins, Boston and Harvard.

Origin Koos teams. May collaborate with Harvard people.


International: Hard air battles of naval sea & land seem to have favoured Americans. And no further Japanese advance in this direction. Burma completely occupied and main activity is now against China. British defeat in Italy with rapid fall of Tobruk and now serious reverses in Egypt. German summer offensive in Russia now under way with gains east of Kharkov. Sebastopol expected to
fall in few days and huge German success near Enningrad. Atlantic shipping position becoming increasingly serious. 3,000 bomber raids on Germany during May & June but some doubt as to their effective losses 40-50 each time.

General pessimism about Middle East situation.

August 1st 1942.

Influenza: The flu epidemic continued main activity has been on the differential effects on 9/6. Subject to special researches problem is what unadapted strain A have low 9/6 ratio B grows amphoteric but not at all.

c. Produce excess amniotic fluid D do not infect mice E.

Adapted strains A have high 9/6 ratio B grows well amphoterically and c. Reduce the amount of amniotic fluid D infected mice.

First passage seems to make it easier to obtain the unadapted type. (8-9-92).

Long passage strains show a tendency toward much higher 9/6 ratio.

There are striking differences in the response of patients to same for as measured by Thrill and by amniotic inoculation in eggs or in mice. The amniotic gives the maximal apparent neutralization.

Rabbits immunized by intramuscular spray show definite antibody rise (Kinh).

Volunteers so far have given poor response to B. Better with 2 large sprays to effect with adrenalin.

Prendice & Williams no Dr. for these organisms yet.

Tager's paper completed - Response in secondary vaccination 8 to intensity of Ison July 30.

General: Business in Baltimore July 27th gave broadcast talk on Food Medicine a new letter to M. I. B. to prevent Bill Goddard going down for 3 weeks and this morning for a few days.
International: Overwhelming success of German Offensive in Northern Russia. All of Brest region occupied, and now approaching Sevastopol and Yuga. Russian oil supplies now virtually cut off. Persian Gulf temporarily stabilized.

Japanese spread in China & threats to Batavia. Fuel shortage leading in India.

Raid activity in Pacific: Air offensive against Germany on moderately small scale apparently making no effect on Russian effort. General pessimism prevalent.

August 24th 1942

Influence: To further consideration or partial short circuits.

Passage of unadapted strain led from first those gradual loss of ability to keep on unadapted phase.

To a considerable extent for red cells will absorb out adapted type leaving predominantly unadapted type.

These results not very satisfactory but indicate fairly clearly that 100-1000 adapted particles are necessary to multiply.

Some alien biochemicals give very short results indicating that high antibody already is concerned.

Rabbits marketed for future antigenic differences.

Elsewhere organisms like isolated from mice, none human material

Lymphogranular agglutination, two strains established in mouse brain and producing definite mouse lung lesions.

General: Army Education Service through photographs, models articles for school

Damage done prevented. “The in May’41 article sent off. Work ended at

Hatfield marred by in-game attack. Children all safely through measles
Educational - At the moment found temporarily more difficult. Germans hold 50
miles from Stalingrad but have probably cut Volga supply line. Russian offensive
at Stalingrad making some progress also now Russian air activity over Hungary.

Pacific American footbath obtained in Dotonos Guadalcanal particularly occupied.

Japanese landing at Ulithi Bay today claimed to be completely repulsed. Banges at
work on Allied side... Commands said...Indirect failure in big Boppa landing
with serious fighter losses. Russian activity over France also with heavy losses.

October 2nd, 1943.

Influencing: no signs of clinical fever. Lab work continued mainly with anadapted
adapted change. Second series of BEE from Strool first passage started.

Examining first series.

Biological difference between old and unadapted clear. Absorption experiments
unadapted unadapted means more acid than adapted and unadapted means only
neutralized by acid antibody.

Atlantic neutralization tests showing fairly consistent results but some convalescent
sera fail to show development of acid antibody.

Skin test with heated Atlantic protein being investigated by Beveridge
not clear whether it will be useful or not; children's reactions very slight; no
conclusion with first test. Repeated disease controls pretty consistently negative.

Lymphoplasmocoma Invincible.

Stubbings strain growing well in yolk sac. and. Red antigen performed.

but not yet tested. Truncal ring lesions are definite but smaller than filariform
strains. Nagano has some preparations which appear to give good red cell
agglutination but not yet shown to be specific; also looking for this test.

International: Japa now Cross Stanley Range but at present nothing northward again; problems in Solomon Islands much as before. Stilwell had apparently about full occupied and Vogt reached north and south of city. Stilwell apparently a disastrous failure more than 1/2 price cut.

October 31st 1942

Influenza: Second series B.F. carried to unadapted passages with general influenza

Resemblance to first. Mouse results to date indicate that unadapted becomes progressively more able to immunize with passage.

Serological difference definite but very slight. Absorption coupled with extraordinary result that absorption of either serum with homologous made it more specific. More investigation needed.

Titration of virus. First results suggest a real influence on ORT's in Tray June Immunized—then on graphs cross June 26th.

This calls for results coming out interestingly great majority showing no rise to second installation green January nine. Case in field shows third but atlantic + neutrophil.

Skin tests. Have evidently many nonspecific aspects but there is enough to indicate they are dominantly specific. Some discrepancies between third and cutaneous mouse and atlantic titrations shown in this series.

One patient managed well in B as well as A by third.
First paper on chicken of virus at 37° required - confirmed. Gross inhibition tests difficult to carry out. But indication that non-reciprocal relation holds the inhibition using progressively less readily produced in the order

**B. P. L.**

- Increase - trend.** 6**
- Fall - 65 - 89 - B. Vaccinia. No evidence at all that vaccination inhibition can be produced.

Human cells specific for adapted form and allow fairly absorption and division rapidly e.g. for these. 274350 in cell 572 cells. 2540 division in warm after washing 13.30.

Sperm - Very little from regular apparently very poor yields from 37° growth.

No technique of removing surface lesions developed giving regular blue material. Suggestion that histioid test may be obtained with rat cells [??].

Histofiltration negative. No positive findings from 3 cases tested. 30 or.

Lymphocytes meningitis. Bone suggests persistent virus lesions in embryo inoculated amnionically but nuc + grooms negative. Excision cases.

**Lymphogranuloma Inguinale.** Free antigen from guts are satisfactory.

Vaccines for clinical jaundice.

General: Miss Austin sends from England. They for article published.

Promised article on future for Halbeny. To be nominated for State Peace Council C.S.I.R.

Mcvass et al. Hope to get papers written + have birthday next month.

Suggested renovation of some U.S. hospital personnel.

International: Situation will only last longer and not much progress in Caucasus.

None of the Russian counter-offensives have materialized. Several big RAF raids started 7 days ago.

25th April, daylight mean + 3 Italian night raids.sh British offensive in Egypt. They made no more than slight local gains but appears to have air superiority.
Footnotes: position confused. But enemy reinforcement of Cape or Fadak canal. Interim naval action with Japs at present claimed to have destroyed Australian advance over Free Stanley Range.

November 30th, 1942.

Ijburga. Board on Sunday + most of first half of week occupied in making up adaptation story + report for the Army.

American volunteers given second inoculation + sealed.

These passages unadapted still typical but show increased power to influence nice strings still shows any adapted type.

Mice killed students contested. Are older mice Wilson type.

Accumulated susceptible strains form group of few sera with sera on no risk and striking size by mouse test.

Narcotics: Anew: has grown pneumonic type organism from renal cases (4) grown only on solid or statically agar.

Narcotics: Tages skin reaction showing almost completely sometimes rather severe with itching + third renal +. Change case of Miss A's reaction or local super.

Ligning: Tali red to many nonspecific reactions + King would demonstrate.

P. Proved growing in yeast in.

Next: Miss A to start on chemotherapy in mouse ring.

General: Holiday at Sunnyside + Phillip Island + P. Perceval + J. Kennedy.


600 forMed: received. Sent off discontinuous variation article to A J. Sc.
Compiled reference report for army + first draft of Varicella paper.


Rommel now backs to El Agheila - Invasion of French N. Africa by U.S. + British forces with general raising of entire French Africa to allies under Darlan (after anxious but equivocal) fighting now between Tunis + Reggane. All France occupied by Nazis. - Firmly decay but guest occupied with recasting of whole French army. diary reads on Genoa + Tunis. Russians threatened by Churchill. Russian offensive at Stalingrad has encircled 250,000 Germans. Another in progress near Rjas.

British naval battle favourable to us. Extension of area at Guadalcanal.

New Guinean force pushed back to Pauwau. Beach head but more active in form.

January 2nd 1943

Influenza: No definite advance. Mostly occupied in digging out + working.

American troops showed practically no cases except in B. Is this to be correlated with the fact that their hospitalization figures show no influenza epidemic in Iraq?

Army reports in India claim indicate that there is a persistent low grade disadvantage following smallpox even in unvaccinated were not vaccinated.

Tissue Rolls vary swollen up and additional nurse + x-ray technician vaccinated carried out. First few results of importance of allergy in producing symptoms.

Dr. writing up allergic reactions impressed with promising correlation will susceptibility to infection.

Disease figures can be infected in another more effectively with Wollman virus.

D. Hyde B.F.L.
The experiment indicated that the ophiochorda could attack N.D.V. aberrationally but repeat failed.

Newcastle Disease. Received spot of all fluid containing N.D.V. in eye with acute conjunctivitis in 24 hours N.D.V. resorbed from feline of 0.25 cc. tears + pus in 2 cc. at 1:100. Some general symptoms at 30 hrs. 70" trace of antibody by direct test at 16 days.

Novo specific reagents. To finish rotations: great difficulty in producing agglutinating emission.

States. Many crops in fowls susceptible after enucleum

Poulacconis. Mrs East has isolated a strain from pigeons one of which was selective. Of importance to air force. Horse being pullacconis is quite resistant to chemotherapy.

General. Ordered a good deal more gear for Department. Robert of support from The Board (I). Preliminary publicity talk for more money. Two egg curicles and A.I. to on discontinuous variation published. Fins East.


International. North Africa. Rommel released from 60 Afrika was asked in Tufin. Germans succeeded in occupying Tuni & Beyra and pushing back allies but no big battles yet. Sallam assassinated greatly easing the political situation. Russia. Existence more unusual Sharygard Germans were stunned in and active drive toward Rotor in progress. Holkland and Veldhi Rifai occupied & infiltrations surrounded. 10,000 prisoners Leave their roads on continent on small scale. Great difficulties being experienced in exterminating Japan in Panama but no major reverses. Air superiority..."
Influenza: severe question remains. Some is greatly increased by long exposure in refrigerator suggesting adsorption process but this takes place rapidly when cells shaken in incubator. Inactivated virus stocks when practically no coliphage by means and B.E.D. is less sensitive than 0.

Tests on Charcoal absorb no reduction whatever of BSE with T15 and no real evidence that there is any slowing down in the rate at which virus becomes adsorbed to sensitive cells of E.I.A.

Sleepy-fever active on M.P. to high titre.

Specificity of Charcoal neutralization sera showing high titre but against B.E.D. have no action on M.P. immune fluids show neutralizing normally. CAT tests not yet finished.

Newcastle Disease: antibody well shown by Charcoal. Charcoal neutralization and in some extent by longer contact at 37° with Charcoal itself. Not influenced by teats.

Serum: the antibody rise after acute attack.


Leishmania strain from earthworm established in eggs with new arrangements under way to obtain lousely strain.
Jan 31.

General: Letter from Truscott re monograph - sent request for illustrations + epidemiological material to hospitals - saw George about influenza work for year - definite against mass immunization. Controversy with Burton Bradbury re Gandhi.

International: Tunisia: Allied position occupied by British and French but Rommel's troops not destroyed. Large scale fighting in Tunisia. Roosevelt + Churchill at Casablanca demand unconditional surrender.


February 3rd, 1942. [2 marks]

1. **Neutralization Test**: Test for type specificity. Test is a distinct but small type effect with type against type, no indication that there is any exceptional type effect or dilute serum action.

2. **Alkaline Neutralization**: Theoretical experiments show slower durations from type in direction to be expected allowing for much greater volume of internal reaction mixture. Type sera are highly specific but B.E. = half. Practically no type effect.

3. **Neutralization Technique**: Modified by using type at 45°. This produces an apparent type with specific much less with non-specific reaction of human serum and seems to give more clear and cut readings in practice. It is still not possible to obtain completely consistent values but better.

4. **Echovirus Experiments**: Work is going on a new field of differences amongst virus strains. Echovirus is very reactive, which causing unreactive cells to react completely. It is possible to come off and when removed by serum, leaves cells still agglutinable by NDV. Now plans to work out these differences systematically.

5. **Student Experiments**: With 5% formvaration shows 80-100% pass effective menacing agent while 25° is too severe giving 2 definite attacks of mild influenza. Antibody rates when present mostly below 50% antibody but two persons with symptoms shows no antibody rise; highly significant. Are studied with no third rise above 100% antibody.

6. **Vaccination**: Sera fromThis guinea strain going in eggs but not much real progress apparent.
Professor's Report: A fair proportion of foreign Wassermann sera show Co. with these antigens also some normals. Significance.

G. Leven: Williams has negatimating emission working well.

General: Arrangements to start Army immigration about April 1st under same terms as last year but using separate A and B groups. For evening for distinguished (really) civilians on Sun. 11th. Poster prepared and by Shannon for Army. Some 16,000 cases in Queensland giving negative results.

Jan. Elizabeth had severe D.A.? PIt influenza infection.

International: Russia has been after Russian under offensive and recent fairly successful German counter offensive in Ukraine. Russians have Russian, Kursk, Vyazma, Rjaz and Bryansk but Kharkov and several other Ukrainian centers held only temporarily. Summer Active allied attacks in progress at the moment. The Nazis are having great field occupied. A good few allied local revives in past two months. Heavy bombing of Europe and renewed opening of boat activity in Atlantic. In the Pacific Guadalcanal clean of Japs for some time. Much Jap activity in Formosa western New Guinea region and attack on mainland expected. Bismarck sea convoy destroyed from air.
May 2nd 1945

Influenza: Immunization running to schedule. Moderate proportion of reactions but nothing serious yet reported. 5-6,000 being immunized per week.

Subcutaneous neutralization: Concentration curve is a straight line according to formula: \[ Y = \frac{d}{x} \] at neutral point, with for B5 1.8 value of a = 4 for subcutaneous 1:50. Tested by various methods gave a = 1 for mouse and 1:4 for human sera with 1:50 others show a = 4 on similar trials, value but not fully worked out yet.

Third technique: Virus eluted by Francis method and stored and purified. No being used as stock. 4.5 method being continued. Blood stool is still far from clear. Improves to obtain complete sterile cells after treatment with B or W TB.

O strains retain characteristic well in guinea pig, but at present virus reveal immediately in amniotic cavity. Impression that O-D change takes place regular in 75 but there is no selective overgrowth of D.

Student volunteer experiments completed with two groups of 25-30 guinea pigs intraperitoneally or subcutaneously using 1/2 10th 42nd + 39th B. Their proportion of symptoms (one 2-day fever) and generally satisfactory results. Subcutaneous so far have given better results. This number tested aberrantly shows serious increase in subcutaneous response after immunization intraperitoneally.

No advance in recent typing work. Tricoirus has infected fingers. Due to unstable.

Two of all strains are yet growing adequately in 1942.
Considerable proportion of normals show CF with typhus or plague

Arrangements to obtain ceal cultures material from Puddock.

Arms malaria canaries from Sydney just received.

General: Immunization of Army started April 10th. Williams + others.

An hygienic epidemic advisory committee during March. April. CSIR staff committee meeting.

International: Russia pull apart from Russian fighting which may be

Beginning of Russian offensive: Diplomatic break Poland + Russian Hungary.

Early steady advance leaving only 1 of Germany to Menz and leaving

fighting + come with orders. Black fever Encephalitis + Tularaemia captured.

Heavy bombing of Europe continued plus heavy German U-boat attacks in

Atlantic. No important activity in SW Pacific. British resources in Burma.

June 3rd 1942

Influenza: 20000 troops sprayed alternately A + B. Basically ascended to

procedure 110 days off duty.

Some antibody neutralization. Further paper on method received. Experiments

practically finished. Human sera with BC 1 in shows same concentration curve

as ferale serum. Reaction with BC 1 shows deep even shift than previously.

Dilution experiments work with BC + 1 but not with MNB. Sharp difference

between recent and long passage attaining the fowling being more

difficult to neutralize.

Volunteer experiments. There rests completed showing much more regular

response to subcutaneous. High titre sera show no significant differences.

between subcutaneous and intranasal responses both showing good
subantarctic neutralisation & equivalent mouse lives.

Recent OR T1's statistics coming in regularly. Several groups investigated without any significant findings. Yolkae cultures gave a filtrable virus in three sets first name as described by Holley et al in 1952. No immunological evidence obtained that it is of any importance.

Brain material: No positive findings - discontinued.

Some subjects from Rusk died of infection on May 20th. Williams carrying on.

General: News well from of influenza work - Annual report written. Saw at scout camp for 3 days.

International: sudden end to German campaign with complete allied victory

Phase of optimism with invasion of Italy expected in few days or weeks.

Gary bombing of Ruhr and Italy. Sages of German offensive beginning in Russia with very heavy air attacks. Japanese drive up Yangtze now being turned back after destroying rice area. American conquest of Ath in Aqualon's 6 boats said to be being more successfully attacked in Atlantic. Two important

8-12 Pacific activity.
July 1st 1945

Influenza: Serial minor occurrences with larger one now developing at
Ponagata. So far no evidence of effective protection by A virus sprayed troops
Severed A strain isolated, including 2 by yolk sac methods. The patient
in U.S. Hospital isolated B virus by Iteri and no cause isolated. A is obtained from

00 strain of influenza A strain isolated only by yolk sac technique
not by amnion inoc. 75% / 160, and on transfer grew 0 and D
vaccine with normal characters. 00's obtained by high dilution with sac
passage 05 + 05 with four dilution. Another strain E1M from Ponagata
also in 00 phase not yet studied.

5:45 a.m. First draft of paper completed. Real curve has definitely a curve at top.

Resistant disease very difficult to neutralize in chickens. Homologous virus
shows unusually wide range of sera which neutralize.

Flavocapsa virus detected in 4. Several strains from various sources

Raising trying to grow in vitro at present without success. Another filterable
bacillus from Deb.

Failure to grow communicable from self, again by YF method.

Twin influenza - no antibodies detected in numerous serum tests. Arrangements
under way to examine frog lungs from abattoirs. Read English papers on
subjects suggesting possible epidemiological importance.

First neonate sera to far good response but animal tests suggest
what qualitatively less specific. Bel differs from Melbourne. Hope to
analyze phase differences by this method.
Slight injury: no improvement. Back sprain + ducks eggs being used.

General: C.H.K. accepting big English appointment with Rockefeller with
new as possible future director. Negotiations with University being finalised.

Went down to E.A. in August + worked on epidemics for Science Film Review.

Had dinner with 62nd US Army Staff. Two articles on Conservation in Asia.

International: The Rand activity in Europe but very heavy bombing of Rais & Italy.

Appears to have been moving anti-terrorist success in May (no results) June
the first month since beginning of war for Atlantic traffic. Much talk of
resumption but some doubt whether it is actually contemplated. Rais in Russia
today news of attack offensive in S.W. Pacific namely against Rendova to + New
Georgia no details yet.

Aug 1st 1943

Experiments: Survénde carried B strain from Mozambique by 2 amnionic passages
in embryos of O type but current work may show some equivalent as
the strain grows much less activity show for in both cases hiding only in 7-8
days without detectable aggregation.

Further experiments indicate that where is no OD plasm this being merely
relatively pure O. Group A is about verocelus alum ammon and appears to
be slightly less prone to allow D variants. All work so far is compatible
with OD relationship established last year.

S.A.W. Series of tests with same showing nothing unexpected.

Semidetached BM shows quite similar duration as previous in Peng.
Neutralized by antiserum of sera

Influenza virus test on antibody titer negative

But immune sera are rather puzzling sometimes showing sharp difference

Between B19 and B20. Sometimes not. Fully clear difference is evident

Between B19 and new B20.

In current URTII, one more B rise found with failure to isolate from

gangrene. Mostly negative.

Students sprayed with diluted virus showed fair protection of symptoms

But no antibody rise.

Possibility of using virus for material for cutaneous immunization

Being tested in in mouse tests.

General: Appointed Director to succeed CHK next year - not particularly

enthusiastic at present. Work the family (284/434 and Sydney) 20 agree

do his suggestion of doing pleural research first. Miss Steel in middle of

bad mental breakdown. First leaving Adelaide Institute.

International: Invasion of Sicily initial success. Occupation of 75% of island

But now from German resistance in N.W. Mussolini resigned a week ago

And at present uncertain whether Italy will capitulate - undoubtedly wants

to become neutral. Germans occupying Salerno, Tarento, & Tunis, Italy.

In Russia: German offensive in Kharkov sector short lived followed by

Russian attack toward Gub. Apparently both very costly with very small gains

In Britomart: New Georgia occupied except for Munda schoolhouse
which is proving very tough. Considerable naval success in Kula gap. Some advance in New Guinea toward Salamaua.

September 30th, 1943. (2 miles)

Influenza: Scope of Avenue of epidemics a considerable proportion of enemy material shows B virus but failure to isolate virus.

Ben B serological work completed; relatively distant from fie.

Knockout finds 8th emerie much more sensitive to early passage B (Ben) than 12th annuity. So far no success with types variable in micro using this method.

Possibility of chemotherapeutic approach to fie via first test being explored with negative results, which rather suggests value of method.

[? wekera? 1931]

Rabies experiment W. against Newcastle comes off well in allantoic cavity. Technique of washing out allantoic cavity with Ringer seems to have many possible applications. The evidence that serum antibody becomes effectively attached to the living cells.

Students are back and proportion already for next - all first and second bleed worked out.

Yark lymphus: Chemotherapeutic V.186 received and under test - preliminary results not encouraging. Subcutaneous inoculation shows signs of a pre-30% big dose of yarla - not infecting - smaller ones positive.

General: talked to BMA and New ARP on influenza.

Recruit change from Harvard to Durham Decides - will probably go.

Fred Godd married - Made preliminary arrangements to get new assistant and to have some histology done by Elder.
International: Italy, Italy fell on Sept 3rd but rapid German occupation followed. Invasion of mainland relatively easy in South but very severe fighting at Salerno now approaching Naples, Sardinia, and most of Corsica in Allied control. Mussolini was freed by Germans.

Russia: Very extensive gains in Summer and offensive including Bryansk and Smolensk. Toward Polskovo, now against Berlin, over most of the southern front.

Pacific: Australians still American, Salamaua and Roi captured.

Tokyo now being attacked. Heavy allied raids on Kolomai.

Jun 15 1942

Most of month spent sending lectures for Harvard. Ptolemaic contains some new ideas in necessity for interstellar communication.

India: Anthropological evidence of primitive city of sacred wells in Atlantic Ocean, now used by U.S. forces for recreation.

Hermetic connection susceptible to 1931 1st infection.

Tokyo, Peiping, Chichibu, receiving American troops within month.

France: Just hearing for U.S. Probably of being offered Harvard lecturer at Cleveland. Lunch with National Bank director.

International: Closest state of Italy 90 miles 5 of Rome. In Russia, practically all east of Donetz taken and Guards occupied, being attack via Berlin. Current advance from Kiev.

In 5th, Pacific: Truk taken and American invasion of Bougainville. Strong raids on Rabaul and a good deal of air and naval activity.

Germans regaining most of the Bocceanese islands.
Summary of 1937-38 onward:

1937. April: Aggregation of Q mubahimae by immune sera.

July: Adaptation of Q to egg; differentiation of two major serological groups in influenza A.

Oct: Some culture of Q.

Isolation of current epidemic phlegm strain.


April: Compared 1st draft of book, *Bacteriological Aspects*.

May: Strains B + pseudoviruses grown satisfactorily on egg.

July: All or nothing status of horse antibodies.

Oct: High susceptibility of guinea pigs to local phlegm strains.

Stomatisis in primary paroxysmal brin in children.

Dec: Infusion of guinea pigs by oral route with phlegm.

1939. Feb: Social grouping of horses established.

April: 1st A. attack.

July: Influenza A epidemic.

Oct: Influenza A epidemic.

July: High pathogenicity of Australian Q mubahimae.

Aug: High pathogenicity of Australian Q mubahimae.

Dec: Rapid method for quantitative fastacocin infection in mice.

Dec: First amnestic excursions of influenza virus.

1940. Jan: Amnisic shock effective for all strains.

Feb: Hyperreactivity of egg Q for guinea pigs.

April: Higher line of ferrets in *Q.* cultivation + amnestic reaction.

1940

Sept.  First primary amniotic isolation from human cases.

Nov.  Started testing volunteers with attenuated strains.

1941

Feb.  Method of amniotic inoculation by syringe needle developed.

Apr.  WS the pneumonic in cynomolgus monkeys.

Sept.  Good response to B intranasally.

Oct.  Close resemblance of Newcastle disease to influenza (Egger).


1942

Jan.  Agglutination of RBCs by vaccinia

Feb.  Mooted volunteer expect intranasal immunization.

Mar.  Jeans whiffed from being agglutination.

May.  The epidemic Recognition of O.D. pneumonia.

Sept.  Influenza within week.

Nov.  Hype within week.

Dec.  Human Newcastle disease.

1943

April. Sub aberatic neutralization $[N] = 5^{12}$ $a = 3-4$.

June. A + B isolations yield susceptible to O.

Sept.  Bovine of K.D. Ig 0.2.

Nov.  Certain cells only of amniotic sensitive to fern.
1944
Jan. [Sanlam Echoes November]

April M.E. & aggregates in O fashion

Aug. Guinea vapour active on fever

Sept. Cottontails - virus from Queensland mice

Two: Method of maintaining O by frost cell absorption of embryo egg

1945
Jan. Eschowia aggregates same range of cells as vaccinia

Feb. Vaccinia & eschowia aggregates are derived from cell virus

Mar. Almost complete immunity between vaccinia & eschowia

May 1. Influenza liquid injects aggregates of same range as vaccinia 1918

October Trumpo Kasmaggulmin for in vivo Kasmaggulmin series

March A & B influenza epidemic adequately vaccinated by amniotic method

December. Kailui - Eschowia aggregates give V type Kasmaggulmin

1946
January Sharp difference in fluid cells for third Kasmaggulmin injection

March Exposure of new antigens on red cells treated 2 months Kasmaggulmin

April Welsh bacillacea rostrum vaccinia Kasmaggulmin

May NDV treated cells aggregates by influenza mononucleosis sera

May Influenza A epidemic: coated cell aggregation in mumps

Fibron cuticle filtrates remain virus receptors from red cells


Oct. Desquamlising syringes in Alaska filtrates

Dec. Regular use - Desquamlising mucin
May 1st 1944.

Returned to Illinois from U.S. March 28th.

Influenza: Technique of preparing antiserum preparations of embryonic membranes developed—especially use of single layer membranes showing red blood corpuscles.

Reactor not yet clear. Many going to presence of virus in food from in normal membranes. At 1% hours the fluid is free from cells has a high virus content, and no unexplained biological change can be seen in normal membranes. At 6% hours some evidence of degeneration.

M.E.F. Solution by influenza virus gave titers 1:100,000 which by adsorption went down. These latter find some useful aggregations of embryonic and not adult frog cells. These high titer ammone fluids used as 0 type aggregation is obtained e.g. 1:1,000 with embryonic cells.

Serum from embryos infected with influenza virus aggregated.

Attention is to follow up significance of 0 type aggregation. Need that more oligation can be shown with guinea pig cells.

Bacterial aggregation will far too few show no positive results.

Williams is facultative strain growing in allowed cavity.

Rajah. Penicillin on Ulcer developing methods for estimating activity with open glands on agar.

General: Starting new edition of egg monograph.

Virus as organism for Howard.

Some comment about mutation to muleide.
July 1st, 1944

Influenza: MEF stay completed. O type agglutination is regular in fully adapted form but 39th passage from 1935 was free of type. This being continued by altered passage ( Sears kind). Altered passage shows gross irregularities with dissociation of ailing from appearance of kaemaggulumin. Comparative characteologic titration shows that 1/100 1.0% of units does not still nontypical but multiplier in ferrets and mice. Using ferret sera there is a very distinct serologic difference between MEF and MEF.

Spray technique going with 1/100 to possible immunization by MEF mist in ferrets. Not nearly as efficient as direct intranasal immunization in mice.

August 3rd, 1944

Influenza: MEF. Strongly multiplied by ferret sera is absorbed and eluted by guinea pig cells. O virus stored in refrigerator 2 years has retained its full character as kaemaggulumin and is also absorbed and eluted from guinea pig cells.
September 28th 1944

Influenza. Re-study of O anti-serum completed. BE in passage for 20-0 passes now is an excellent source of virus free from excess protein. Penicillin nephrotoxicity technique for isolation is effective. Intermediate appearances can be interpreted as representing mixtures of 2 components 0 and 1.11 but the possibility of a continuous series has not been eliminated.

13 day embryos are best for O multiplication.

Lung is not always the primary site of infection but frequently is where reaches a maximum in 2 days and is gone in 3.

Occasionally virus colonies in lung after 1st inoculation more usually virus fails to take.

Goodie or influenza virus. Vapour very active on debris with complexly protecting mice from 1:20 virus. Related except being planned.

Intravenous immunization of mice with living virus was remarkably effective. Doubt whether of any significance this might be useful test for antivirage.

Hatched out Francis method of neutralization with lung broth satisfactory.

First scale commercial flu vaccine production has been started (28.9.44)

so far satisfactory.

Plasmodiologia like organisms

A number of positive CP reactions have been obtained with human sera and both CP and N.S.U strains of plasmodia. Regular to each N.S.U. case diagnosed by failure to respond to penicillin. Possibly what
Pencillin has proved a most effective. Some definite CF units B.I.P.P. are seen from autemic cases.

November 3rd 1944

Influenza. To ensure passage absorb with foetal cells from lung emulsion.

Embryos must be 12th day to give satisfactory results but are apparently equally good up to 17 days.

Emergency test of lung 0 vaccine in human not impressive. 2x increase only.

Ironically, antisera still effective and appear to be at least 30 fold in human material.

Emulsion substance in undiluted lambda fluid can prevent further but looks un safe to effectively worked.

Pilot production is running well with 10 units and a few more dozen for having have been received. C.S.I. getting building under way.

P.P.L. Thalasemia

N.S.O. cases give 90% positive CF with 1114 strain from autemic, a moderate preparation of random human mild 20% are positive but only 7/17 Red cases donors.

1/2 cases of atypical pneumonia contribute. Few penticillin cases of NSO also positive and 1/2 geniculate cases +

Established strain from C.B. Prep. + on transfer to mice.

Fake strain (?) strain brought down from N.P. by Ewin, Jackson & Ferris.

Have this established via grew age + eggs. Good answer on chow chow

10 cases reported from India: serum to come.

Pentacocis. Strain from deBurgu rice water appears to be identical with pentacocis.
Jan 1st 1945

Infusion. Paper on O-D and off to Adelaide.

Infection of O virus in Atlantic cavity can occur but much are
readily shown in ammonia. Some elder in mice; several O rabbits have
been isolated from mouse lung.

L-The infected with O virus and giving relatively large amounts of
virus from one at 2 - 3 days. The normally small amounts of D antibody
in contrast to those previously studied. Analysis of sera under way.

Some evidence that O-D change can take place in ferrets.

Absorption of antibody.

Antibody can be absorbed with serum-coated eggs and there is an
indication that the effect is rather specific but technique is not fully
worked out. Some experiments suggest that non-specific antibodies can
be removed by an unrelated D virus.

Vaccinia. A few confirmatory experiments - Haemagglutinin is absorbed by
susceptible cells not by transplanted. The evidence of elution - With dishes
cells there is a gradual extension of dislike 2 - 3?

To prevent the organisms.

Concentration fixation larvae are unsuspicious since all Sydney NSVs
are positive and majority of normal controls from Sydney and practically
Revetral infections. Van der Jackson have two sets of retrolural chains going from North Queensland which appear to represent two groups of minute蜉蝣. Double cross immunity.

Letters from N. P. to be sent down by Macleod.

Two guinea pig children.

Sure to be sure for malaria C.F. and incidental tests of type for

+ dip. antibodies.

Bactropoccal infections.

Rogers attempting to find suitable agent which can be raised for

pneumonia studies. He should get strains from C.F.

General.

Intensely engaged. Miss McCullin as statistician for traverse department.

Will probably give first grand lectures on background of infectious disease

in preliminary draft of TB prepared. Appointed chief of Exp. Ac.

In C.F. appointed from Feb 1945.

February 2nd 1945.

Influenza. Apparently normal strains consistently show some power of serum neutralization

of B.D. and a very distinct power of neutralization in amniotic cavity of

B.D. Little evidence of specifically B.D. antigens in differences.

The differences between strains being of much more important.

Vaginal cells are susceptible to O agglutination. This McEwan worked out quantitative

relationship to guinea pig cells. Absorption + elution follow normal course.
Feb 3 1945

Effect on influenza: too weak off to Army & Rest in Science.

Effect on dust much slower than on chimps and requiring higher concentration of virus. As virus does indicate somewhat smaller order of effectiveness 1, 2, 3. H202 no effect on third.

Echoviruses + Vaccinia

Echovirus virus preparations either chimpanzees or mouse brains aggregated same fast cells as vaccinia + no other type. H202 report for have no action. Echovirus antibody behaves similarly to vaccinia. Immune calf (1944) sera neutralize echovirus Raamagglutinin. Immune sera from mice + rabbits in preparation. Rabbits are killed by large intravenous dose of echovirus virus

Working hypothesis that Raamagglutinin production is a common characteristic of the mammalian host viruses.

March 1st 1945

Influenza: O-D. Horse immunized with O + D strains invariably show high neutralizing titre with little qualitative difference closely resembling fresh sera in this regard.

Vigorous cells are not agglutinated by H5F. Fair amount of serum agglutination by normal serum removable by absorption.

Rhino on Flu. Present indications are that 12 is most effective of the rhodogens and not much difference from molecular ratio. Thermally activity in air reduced to 02. Br 12. 1. 90 of partition coefficients are valid.
Ectromelia vaccinia

Vaccinia cannot cross neutralization with mouse immune sera. Todd says this can be satisfactorily immunized with vaccinia & unchanged vaccinia giving only tumors (generalized vaccinia). Immunity with formalin killed vaccinia followed by challenge was effective. Rabies immunization not very effective owing to effect of mouse cells by serum.

Ectromelia virus: either mouse or chicken origin. Agglutinates mouse cells to about 1/2 serum. First cell type.

Rabbits receive graded doses of ectromelia intravenously. Cross immunity effects under way.

Vaccinia and ectromelia seem agglutinins are separable from the virus particles particularly by means of absorption on susceptible red cells or high speed centrifugation.

Addendum: Passage to Central Australia on greenhorn monkeys.

Fusing this with guinea pig and immune serum. In guinea pig protection vaccinia virus produces on human serum.

Jackson probably seeing further combining with fowl's work.

Hagen has some excellent ectromelia strains in rabbits and some green oil responses of fowl in ectromelia suspensions.
April 3rd 1943

Influenza: B strain non-specific infection. Beginning to phase into order. Healing faster

inoculate 62° for 15 minutes. Then in other cultures and with B strain.

Nurse tests of normal sera against B strain under way.

Endemic cases give relatively clear results other tests appear normal

with excess rises. Differential test of bone taken sharply from A.

Let same with more therapy.

Hyperacute rabbit sera prepared for A or B strain.

Leucocytes in specific culture of first test by rabbit sera is destroyed at 62°

in vitro. Specific antibody is much less affected.

Influenza and vaccine symptoms have about same effect.

More details on virus not being written. Preliminary reports to laboratory

about experimental test in Pseudoravirus, etc.

Vaccine Culture

Test quite compared experiments shown ovine cross resistance between animals

immunized with living vaccine or echonemia. Test with B strain gives

virus. First killed vaccine appeared if anything, to facilitate infection

by echonemia. Virulence of challenge virus killed Eos.

Failure of vaccine antigen to sediment with virus in high speed centrifuge confirmed

C.P.D. of sheep

Material from Eos. shows no evidence of colony on Chocolate agar or on

rabbits eye. Bright indication that something may be happening in amoeba

embryos.
Salmsona paratyphi (locally) organism growing in chick sac apparently identical with that described Anderson & Godson. Chemotherapy experiments contemplated. Pneumonia in E. coli infections - story is now very thin and no explanation is forthcoming as to reason for failures from Sydney.

Koch in Brondbyia tragic has commenced first larges experiment using bacteria formalin. Rather high proportion of deaths from general staph infection. Preliminary from chick lungs.

Letter from Story indicating that for both Rhodes cases are a species of chick lymph not immunologically related to RMSF E.B. or S.A.T.C.

No definite advances from this end.

General

Anderson to start this month. Miss McRae has commenced work in University department. JB at moment.

July 6th 1945

Following. Ca phosphate precipitate vaccines being tested in mice. The origin of epidemic influenza. M.B. ward being carried out by Army in general hospitals. All troops immunized with 0.5cc. conc A.

MCF passage in mice seems to be giving a still more degenerate variant.

O&D strain in immunized mice shows no specific differences - inadvertently there is a high non-specific eradication of five viruses decreased by heating up 65°.

The strain used will grow in 5-6 day embryos more near embryos.

Vacuna & Experiments

Immunity experiments show significant but not complete immunity. In vaccinia grown by scarification and by i.p. inoculation, the main difficulty being to obtain an appropriate challenge test.
Vaccinia was intradermally in each definitely better than subcutaneous.

Fermented mouse brain in a significant effect but others fermented only
and vaccinia was immunogen.

The being used as sole for challenge but not much more definite than use
of dried killing heat. E.M.Y. 1 P. gave some immunity but small areas of
long vaccinia 1 P. mode. E.M.Y. tested after 8 weeks gave rather characteristic
intense emaculating reaction in the tail without generalization. Those that have
survived one P. challenge give no tail reaction.

Narcotized different ages killed by tail inoculation shows many deaths in 4 weeks.
Least reactively in 16 weeks. Intense local lesions in 10 month, much.

Possibility of experimental epidemiological set up with this virus.

Nature of vaccinia: Ectromelia Bacammagallinum

Nonspecific tissue liquids agglutinates the same cells as these Bacammagallinum.
Rabbits infected on skin shows no production of Bacammagallinum and very little
end Bacammagallinum. Subcutaneous inoculation of egg material gives an
active response in one.

Young rabbits given once intravenous show gross eye and nose
infection following.

Summary: Barrows confirms both what many seen grows in York and
had infected strain direct from human saliva.

Possible specific pathology in York as shown by feeding fatty

Antibody in lymphocytes.

Anderson following appearance and disappearance
of antibody in lymphocytes bronchial after intranasal mortar inoculation.
with M.E.F. no few results produced till recently. While Co suspension for vaccine a
quite striking local accumulation of antibody in the lesion was demonstrated and
made separation pressure. The evidence seems to be strongly against lymphogranuloma
being involved in all antibody productions.

November 1st 1945.

Influenza: All except investigations negative except A & antibody virus.

Immunization of mice with CoA virus ineffective possibly because of lack
of subclonal specificity. Thus some working up B viruses for direct test of
this formerly. Experiments on local production of antibody inefficient.

German Epidemic: Head marked in schools M.C.'s outbreak particularly
interesting containing both A+B. A typical A B some strains have
distinct C & character. One case fatal acute pneumonia, with isolation of B
Anthrax isolated with Penicillin + mercuric very effective. Antibody responses
no far from one 9 case shows no response at 10 days from onset.

Antibody: No assay finds antibody + monophasic infection both in gamma
globulin added and fresh sera.

Infectious disease: Two fairly bad infections with isolation of virus. Long struggle
to find reason for few serious contaminant of stocks. N.D.V. by Anderson.

Polonemia + Vaccinia: Further study shows good protection of thymus.
In deeper layers of stock strain well relatively little in scrapings of lymph nodes.
Some relationship can be seen with chick adenoviruses material. Has been
written up in draft form.

Contact experiment with unvaccinated infected mice as source shows
practically no transmissibility of strain by natural route. Renewed 1940 strain.
more being tested to have controls to Andrews for other strains.

Pigs show some with susceptible cells.

Tests were carried out on the nature of the normal immunogen in human extracts. Good or useful source. Evidence at present very conflicting.

Immunogen appears to be active but on the other hand substance responsible seems to be unapproachable.

Mumps following Encephalitis. Knowledge is now getting good production of mumps immunogen in yolk sac inoculation with surviving amnion fluid. Preliminary immunogen experiments under way.

Mumps immunogen fits in series. Mumps Nov. MMM 865 B.

Method developed for analyzing treated red cells by removing serum with suitable serum; only some sera are suitable.

Tech systems. Tender competing works on E tests with neutralized antigens. Good specific fixation with patient sera. Sharp difference from mumps in survival in red bloods.
December 1st

Influence: gastro B seems to occur of A. By standard haemagglutination on additional B from repeat with portal blood.

Primary B strains are all of A character and with only one exception were definitely positive at 3 days. The ratio fell in two groups one with A 0.01 0.01, the other with 2.70. Antirheumatic values higher than those which may occur as low as 2.70. Most reactions by 5 days are negative.

There is very little evidence of anything corresponding to O.D. change adaptation to the attitudinal change being at a difficult process.

A strains had typical O character but have not yet been passaged. Clinically influenza A and B is indistinguishable but there is no evidence of the existence of any influenza Y in the two groups RMH and MS where adequate clinical study could be made.

In two instances consecutive attacks of B and A influenza were experienced two of the cases from which A was obtained were given very low antibody titer then have not yet been tested with portal nurses.

Despite the not very reliable evidence that young people show a relatively specific antibody response as between B and O.N.

Further, situations in early cases giving regular results to 0.4, immunization with B, formaldehyde, gives considerable antibody rise in some but not in other individuals.

Harmful: Anderson using O globulin from Boston successfully.

Tests of portal human lung in antistudt antibody gave better technique practical but only one reliable double additional further finding obtained.
March 2nd 1946.

Influenza: N.1.T.'s. modified method of antibody estimation among pooled tests with less nonspecific inhibiting value. There are very marked differences between cells in this respect. Good tests for mumps are good for N.1.T.'s.

Anderson has a fairly good working rule what no virus between 2 readings = no antibody. This may be applicable to epidemiology in children. Tests of sera show evidence of specific and nonspecific reactions. Argenti may be particularly specific.

Influenza - A infection in two during February. High virus content in early stage no positive at 1:100. October + February strains show much less tendency to pass 1:1 from growth in O form may occur in egg albumin carrier but only in proportion of eggs.

Some virus with human cells enters into a transformable union which is hardly influenced by immune serum.

Three cases of Escherichia coli during December from influenza.

B. Plans for extensive study this year under way.

Non-specific Diamagglutination

Goldin's dextrin gages are active - explain pure does not aggregate but with slight oxidation gives active preparations?

Any phase taken in suitable state of dispersion is effective.

Escherichia Vacuna

Tissue cultured works Feb 1. Mice exposed for long period in chamber in all show antibody - many show fine grade Brown's method for testing blood samples from dial developed.
April 1st 1946

Prevalence: R. A. strain gives an 0.1% rate of enzyme production in allantoic
fluid. It is also extremely susceptible to many infections by many virus with
the most common host cells. Anderson comparing with Schlesier & Ohara
neutralizes only

Seventeen works on R. A. practically complete. Allantoic 0.1% shows specific
non-specific features.

Further work on virus - readable shows that apparent failure to remove antigen is
due to the appearance of a new end-surface antigen in red cells. This appears to be
common in aging foetal and human cells. Antigens present in most human and foetal
cells and can be induced by appropriate immunization in guinea-pigs or rabbits with a
virus which is active against the cells of these species.

Theophylline Pretreatment

This study compared among Fong's purified. Epsps. Any theophylline
excluding phlegmophagia is effective when administered by Gloucester or in the case
of conductivity. At the time.

Tatum: Difficulties in maintaining allantoic passage at high dilute. Immunizations
announced at Ottawa.

Haug: Haug has completed paper on foetus in amniotic early as skin died

Post- thesis work completed by Hanford draft of paper in Fleck.
May 3rd 1946.

Influenza: Papers on Serology of B sent off to Adelaide.

An influenza epidemic at South 34 cases (serological) from Ipswich.

Two cases from Ipswich being confirmed at 2 days and producing

Symptoms of a few cases. Not typical and not known to be similar.

Changes in red cells induced by viruses.

Gradually of human red cells fully worked out excluding mumps and some

difficulties in dealing with others. MDV treated cells are agglutinated

specifically by a number of infectious mononucleosis sera and by sera from
guinea pig injected IV with MDV. The change induced is common to fast

guinea pig and human cells. Other viruses produce cases of changed

agglutinability but no specific relationship except for a limited number of

instances in which second bleed from influenza cases showed a rise over

the initial bleed.

Vaccinia Reaggregation

Recent 1.2 papers read off. Welsh distal salivary will specifically

inactivate vaccinia + rhinovirus Reaggregation but not a few viruses.

Peach monos appear to have a similar action, formal conclusion that

with 1.2 includes all virus in its notations.

Some evidence that Welsh virus can enter human RBCs making

them resistant to the earlier members of the virus gradient. (In press)

Echoviruses (Tsenkau)

Is virus in foci of mice considerable amounts in urine.

Influence of age of mice on spread of mass Bender investigation.
June 13th 1946.

Diphtheria. Formal A strains isolated from both general and hospital cases. The general spread of epidemic. Antibodies + neutrophils to be found in pneumonia in child. Changes in red cell surface under virus action.

Trumps contain S & A which occur cells rendering them specifically agglutinable by antikörper. Reaction effective only at 37°. Very large difference between normal = immune sera. Vaccinated persons show a rise. There suggestion that residual antibody can be determined years after infection.

NDV reaction due to soluble substance not filterable. This being fixed positive P B reactions are not by NDV but by other means.

Agglutination of low-doped cells is practically non-specific. Nervous symptoms with animal sera causing diarrhoea.

Fibrous from young chicken embryo cultures remain for several days even in good condition. The enzyme responsible can be diluted above 1000. Frederichs M strain produces agglutinability but not receptor removal.
Echymotic: Wound made at ridge area observed.

Necropsy: New brain growing as well as E.C.D. but not available for study cell reaction.

September 26th, 1946.

In England June 11th to August 12th. Empire Science Conferences.

Mechanism of Haemagglutination:

Joint work with Reesgean shows that foot plaque falls in a gradient near source. Franklin treated material from England active gave both in aggregating and in removing receptors.

The enzyme in filtrates from young white cultures of Staph. virid. 1/7 is remarkably potent in removing receptors from human foot gangrenous cells. It produces effects identical with those shown by the viruses, excluding nonspecific aggregability by serum in the cold, loss of receptors and susceptibility to loss by complement.

Deakin's toxin removes receptors in the absence of Co. It is neutralized by most b-antitoxins but not purified antitoxin neutralizes the haemagglutinin reaction but leaves the power to remove receptors unaltered or slightly increased.

Brody has shown distinct influence of calcium on adsorption and liberation of inflammatory tissues.

The clumping 1/7 enzyme can be clued and purified from red cells in similar fashion to the serum.
December 5th 1946.

Hemagglutination: Simplified method of utilization of chicken enzyme. & using ferret cells a M.M. is working well. IgG guide from rhegnavar guinea will fluid squeezed out. This material is particularly good for production of active cultures from human cells.

The evidence yet as to the nature of the enzyme. It is active at pH 6-7. Largely macerated by heating 50° for 30'. But dependent on nature of medium in which suspended. Not macerated by acidic, alkaline or phenol. Not containing EH. Requires Ca for optimal functioning. Not blocked by collagenase D.P.I.V. Not a collagenase or collagenase.

Very active production by chicken virus growing in ascitic cavity particularly recent strains. Inoculum.

RDF can remove fixed viruses from the red cell surface.

No evidence of antigenicity yet obtained.

Activity of viruses on red cells.

Anderson has shown that cells adapted with NDV are still capable of agglutinating fresh cells. Differences active clumpable virus from C.S.A. [mononuclear race] and normal red aggregate.

Transfer NDV aggregative cells but fails in culture.

It shows similar failure of heated live viruses to elute. Edition of USA is highly dependent on Co; some others less so. Aesdick that Co, within the cell is available for some viruses not for others.

Red blood removes NDV and M.M. lesions only.
Pathways + of Clostridia

Which renders resistant to some enzymes other than Bacillus. The enzyme has a low pH optimum.

Endotoxins Bacillus aggregates red cells treated with RDE, but was no trace of action on receptors.

Deaggregating enzyme of V. cholerae.

Technique with inoculated pieces of gut shows epithelial deaggregation by cholera filtrates and to some extent by other intestinal factors of gradient of susceptibility highest in jejunum to ileum.

Not neutralized by serum. Significance of adhesion + chlorine with red cells but not quantitated. To a large extent inhibited by characteristic enzyme which has no action on RDE.

Infectious mononucleosis.

Possible transmission to asymptomatics by Anderson. As judged by lymph-node enlargement and increase in RBF-N data. Further RBF-N responses with human cases.

Respiratory infections in children.

No evidence of presence of A or B in Broadmeadows home this year.

Notes: Arrangements for extension of communicable disease nurses and naval recruits under way.
February 6th 1947

Egg yolk enzymes R.D.E. optimal conditions for action pH 6 and Ca 0.17.

When heated in absence of Ca it is destroyed at 55°C; in presence of 0.1 Ca or more it is destroyed to similar extent at 60°C. Then heated at 65°C it is much more stable on acid side of neutrality. The other facts available are:

The yolk enzyme may be similar but Ca cannot be used owing to activation of haemolysin.

D.F.E. Much detailed work done neutralized by serum from hyper-immunized rabbits. Inhibited by C.A.P. (present in some agar filtrates) which have no R.D.E. Histology suggests that the action of the enzyme is essentially necrotic and some preliminary reports with extracted material favour this.

Disintegration of sections from eggs by enzyme by agar filtrates appears to be due to same enzyme.

Reckoning of infection in eggs with R.D.E.

Miss Brown is getting regular temporary isolation in Atlantic County.

With love.
March 1st 1947.

RDE

Because of absorption and elution not well suited to production of
more satisfactory eluates. Technique of production of crude
casein female Coagulase + Heat at 55°C for 48 hours.

RDE at high case under optimum conditions requires time to remove
the heavy proteins of the gradient.

A proportion of B. pseudomallei also have RDE. (M. Gia)


RD-H serology. Anderson was right. Late rabbit sera showing clear
evidence of distinct antigen not present on normal rod. cell surface.
will mix with common antigen with RD-G cells.

This also reacts with cells appropriately treated with viruses: Reactivity
of cells is reduced by redistribution with immune serum.

I. Agglutinins in human sera are absent in cord blood but
appear during the first year. At ages above 3 there is the same
wide scatter of values as in adults.

Francis Phenomenon.

Inhibition of agglutination by heated LEE is only shown with certain
four cells. The power of some sera to show the effect is removed
completely by absorption with RD-H cells. The inhibitory effect is present
in sera from infauses lacking Tagglutinin.

DQE to.

All evidence now points the essential enzyme being a mannan. It is
not hyaluronidase - Staphylococci has no action - no hyaluronidase.
General Summary (continued)

1947.
Jan. Breeding of infection in all counties by R.D.E. [Stone]
Ca + pH in relation to virulence of R.D.E.

Feb. Taggarnin occurs during 1st year of life.
Evidence for existence of a cell-digesting enzyme in chicken fowls.

Dissociating enzyme a mucarase (amylase).

May. Technique of R.D.E. action on mucus ring.
All R.D.E. by use of mucus.

July 23. Substrate of R.D.E. and influenza viruses is a mucarase.

Aug. Enzyme activity of four minutes in vivo on mucus + mucus.
Proc. Purification of Francis inhibitor to near.

Royal medal of R.S.

1948.
Jan. Successful transmission of infection in volunteers. (and)

March. Evidence that amino acids or peptide split by R.D.E. + truns (Gibbok).
Sequence of inhibition in overmucin by periodic action.
First seed of very young emerging method.

June. General method for production of indicator viruses (Stone)


1949.

Sept. Recombination of influenza viruses in mouse brain.

March - November. To England, Canada, USA.

June. Atlantic Lecture of Royal Soc.


Dec. Completed lecture on variance and mean:

1951.

Jan - March: Analysis of recombinant variability of neuropharmac.

Feb. Increased union of inhibitor versus to first cells.

Feb. Stage Hypothetical of virus-receptor union.

Oct. Recombination of R1 cell by cellular infection.

Dec. Recombination of nucleoprotein by viral vector.

Nov. Recombination between HEE and M11H (Burry).

1952.

Jan. Visit to USA. Frame frame for pictorial work seen.

April: Natural interference at a distance between embryonic and albinotic cells.

May: Induced recombination between HEE and MEE in albinotic cavity.

Aug.: Recombined recombination in albinotic cavity.


Rocks lecture. D address of ribbon plaques.

Logarithmic time scale for rage incidence graphs (Pratt Graham).

1953.


Feb. Development of van wals embryonated egg methods for

New recombination easier. Demonstration of electron microscope.

Rhodochrosia 2-contrary figure.

Sept. Two methods of transfer of pathogenicity.

Nov. Analysis of unification of PRS: demonstration of virus of limited replicating power and of viruses that can undergo but not replicate.

Dec. Adaptation of CAM to mouse pathogenicity.

President of International Association of Neurobiological Societies.


Aug.-Sept. Hated on protein Kallid virus show evidence of multiplicity reaction. MRF is very different from MDR. Instead of using antibodies for study of lensy-gone.

April. Elected Foreign Associate, National Academy of Sciences, U.S.A.


Oct. Two. Recombination of CAM + WSE giving small yield of CAM+ with 3-3 endoase groups.

Development of multiple gene deletion hypothesis.

Adenovirus growth of Rubella on tissue culture.
March 1st 1947 (cont.)

By direct test in mice in chick embryo flasks. Lactic acid-generating effect is doubtfully neutralised by our DPE serum - it is that soluble and is not present in allantoic fluids with active measles. Other evidence of its action is obtainable with infected cells.

Blood of infected Rhesus

Some have recently completed experiments showing unequivocal effect both in regard to blocking infection and blocking absorption in formalin-treated eggs.

Infections mononucleosis

A number of definite cutaneous skin reactions to infections mononucleosis components under NDV preparations: Reactions in monkeys given sheep materials known to be only anti-human tissues.

Thanks,

Large number of young children being isolated for CEA test with consistent results. No cases of measles in isolated communities.

Influenza A

Test of human serum particularly from children for the serological classification of A strains; better promises than those of Anderson results. Adaptation of IAI in mice seems to be succeeding with D strain. This is that mutability is associated with epidemic under conditions.

Splenomegaly: Immunisation by vaccinia fully worked out. Thermal mode of spread with duodenal. Only large effect of swabbing on transmission of maternal immunity. fairly close correlation of antibody with immunity.

March 30th 1947

R.D.E. In one host: submucosa present in active preparation but no evidence of the substance suggests that it is not the enzyme. R.D.E. present in red blood corpuscles in red cell extracts. Tuberculin inhibitor also destroyed and more potency.

Absorption of Rassmungulin by mouse lung can be inhibited by preincubation with R.D.E.

Thioreapy may lead with R.D.E. containing material shows apparent disappearance of streptomycin-like stimulating material [submucosin-acid?]

Blocking of infection by R.D.E. Transplant NOV + MME: give adequate blocking effect by R.D.E. in Atlantic City. Preliminary tests in mouse lungs suggest that it is considerably more difficult to demonstrate.
June 3rd 1947

R & E: Action on RED cases can be paralleled in all important points by K102 (data from Rockefeller Fund report).

Blocking exists in allergic cases compared with non-allergic.

Endemic was available of regeneration of receptors after destruction by RED.

RED elicits rapid aggregation from these emitters and form lesion-like ectopic emission rendered reactive by vasa.

Fever

Fever case 1 prepared the set epidermotogical experiment

The survivors of Moscow show a rash coming on 12-14 days after exposure. Complete immunity induced by vaccinia subcutaneously.

Fowl disease

Anderson has demonstrated fowl disease Ordinance learned from a respiratory infection of mice. Appears to be indefinitely contagious.

General symptoms without specific sugars so far.

HepA vaccine

Serological study of Pseudomonas toxin under way.
Phenol mucare

Tried attempting to purify Hgt gr success in cold most effective method so far.

Pepin against human saliva + gastric mucin: gradually developing feel of mucin investigation: large need method for bleaching active mucin in some gastric mucins there is an active mucare.

General: Tryptase taken on to staff to work on means Ewing + R.D.E.

Have undertaken work on genes autogena + antibodies for Sarptongus.

Also occasions for American Research in Medical Service and Stirling.

Surrey Adelaide Aug 26th, 28th.
June 30th


Some evidence that relatively large proportion of albumin protein can
be removed leaving F.I. notable.

Togakas completed preliminary study of R.D.E action on lung. No
difference in immune animals.

One R.D.E semi obtained by use of hortus based immunization.
Ring test appears specific. Demonstrated by direct action on R.B.C's
and by Togakas. More effective in mouse lung and
ascitic cavity.

One finds some evidence of receptor regeneration in all

Treatment

Tominaga's comparative action on gastric mucin and guinea pig mucin
straight through reduction with gastric mucin beyond certain one.

Pseudomucous cysts of every variety typical mucin reaching
very like guinea mucin as well as pseudomucous.

Salt required for mucous action.

Staphylococci

Anderson taking a paper to America showing probable
persistence of maternal antibody to 12 months. Suggestion of
immunization alone being a protective measure.

F.C.H.

Anderson's results with children immunized with 51 strains
show specific effect in some.
July 30th, 1942

RDE

Granular mucin is an acidic Francis inhibitor which is destroyed by RDE. It is purified B.J. subculture. O Rumeo from Morgan is a less extent A Rumeo. A virus is machine.

A lipopolysaccharides are active in destroying Francis inhibitor in mucus. Purified elementary body suspension Stanley is quite active on dialyzed mucus.

Current experiments suggest that our other strains of Salmonella have lost their power to produce RDE, though retaining mucinase activity. This mucinase free of RDE may be a useful reagent.

Method of purifying mucin by dialysis through filter paper being worked up bromoacetate can be dialyzed out to a considerable extent.

Fimbriae in addition early of RDE were compared by I. Ross Brown.

Now much more sensitive strain to blood and fails to deal with regenerating receptors that are fully susceptible to mucus and med. Concept what any concentration of RDE goes quite to an equilibrium level of receptor concentration.

Fimbriae were concerned with regenerating receptors. Receptor destruction following most exposure to RDE continues for some hours after end of exposure. Regeneration commences from 6 hours and is virtually complete in 24 hours (Stricker).

Estramude (Maugée) and Terminal endotoxins show the occurrence of a soro pedicel virus of primary infection in cattle. Hemorrhagic secondary rash occasionally seen.
Sept 2nd 1947

Try some mucinas. Further work on enzyme action of RBC on mucin shows enzyme quickly destroyed almost completely at 65°.

Roe in pH 3.5 tris buffer is completely destroyed in 4 hrs at 37° apparently by the action of another enzyme since 65° specimens are not affected to much less extent. Pure mucinase being prepared by this method.

Mucina action B.C.M. quite active.

Pseudomonas material from mycana femorini case has relatively high titre 6-8000 as F1.

Tuberculosis mucina never Roe nor Bosch together gave Schiff's reaction.

Kidney has no action on enzyme Roe on mucinase will affect some effect.

Dialysis appears promising but is really unstable material yet received.

With marked some effect of F1 dilution.

Mullen's pseudomonas agar showed some while mucin did not.

F1 or A.C.R.A. also failed showed some 85 F1 (1000) others failed to 20 or 20.

General This trouble started voluntary work Anderson each from U.S.

D. Charlotte Anderson. Adelaide.
Actin of media on mucin has been worked out in some detail. Enzyme change in virus titer has and W3C between 47.5° and 60° with development of red-colored viscous solution running parallel to furnish to destroy mucin.

Les new pseudomucinous cells with high viscosity also. One is of serum type histologically. Boiling in presence of salt coagulates protein leaving mucin in supernatant. This gives normal fluid like.

Protein is very satisfactorily concentrated over filter paper or sponge giving RBCE reaction.

Pure mucin has a moderate effect in reducing F:1 dilute of extract mucin and less on pseudomucin.

In one effect, 0.5 gm mucin was resistant to action of Fea but on heating to 65° became highly resistant.

December 4, 1947

Purified mucin from pseudomucinous cells being used for enzyme experiments with excelent results.

Tests done on hematin RBE destroying enzyme in both a betaes - hematin soybean active in attacking RBE or virus enzyme provided conditions are under pH 7.5 absence of Ca.

Tests human RBC agglutinating antibody from immunization of rabbits with QVE mucoid and paraffin included by zone but not by other ovarian mucoids.
Action of any diastase peroxidase converts mucoid into an inhibitor for WSE (active). Abridged WSE is also sensitive to F.I. More extensive treatment of the mucoid (mild) renders it inactivating for the unhatched.

According to Togeho, peroxidase treated cells are still susceptible to infection until virus although incapable of adsorbing R.D.E.

Preliminary results with M.E. show that it has very little enzymic activity—apparently incapable of inflicting peroxidase treated C.A.M.

Tumors culture medium can be classified according to

\[
\begin{align*}
\text{ACRA} & \quad \frac{2}{9} + \quad \text{F.I.} & \quad \frac{4}{9} + \quad \text{R.E.} & \quad \frac{2}{9} + \quad \text{R.P.H. or} & \quad \text{Carcin.} \\
\frac{2}{9} & + & \frac{2}{9} & - & \text{other design.} \\
\text{Injection of new R.C.M.} & \quad \frac{2}{9} + & \text{no correlation between any two quadrates.}
\end{align*}
\]

Bone marrow mucous has no F.I. but is good ACRA substrate.

Trypsin produces an ACRA protein from nasal and egg

Viroso can be readily converted into D by trypsin at pH 9.

Dec 31st 1947.

Further experiments with purified mucoid as substrate show that

effect analogous to reaction gradient can be obtained eg with M.F.

Frieden is not quite equivalent but being widely active through skin

may be only because first cells give falsely low values

D + D shows identical activity of relatively high order.

Expansory experiments with mycorma virus show no evidence of

any reaction with red cells.
Toxins finds sedimentation rate of red cells greatly increased by mucoids and uses this as other elevation of osmotic pressure hence mucoid from red cells added on by RDS.

Fedchuck getting slight evidence of effect of RDS on substrates without R1.

Feder finds that chesnut are drained by chronic osteitis giving a mucous fluid with + acute but no R1. Treewise desblings

True but 0 cannot be converted to a pneumococcy by any of the available manifestations.

Human expir on rabbit each, rabbit material gave only one positive at 20 days. England's remainder with fresh material on Dec 21st.

seen in general.


Revision to establish biophysical and bioclimatic in America and engagement of Ada for job. Efforts to get money from AMP on half the work side in balance. Offer from Hellaby to direct new Institute of Immunology in England declined. Declared invitations to go on Scientific mission to India and to conference on RDS in NY for 1943. Agreed to give public lecture in Peru in August and to act as Section President at National ANZAB. Superannuation arrangements made. F.R.S.C.P.
May 6th, 1948

Nucleus + mucoids  Kinetics of action of mucous on purified and mucoid compounds.  Series of six papers on technical aspects of mucin in relation to influenza virus action and to Adelaide situation.

Two high virus source of F.I. found in sheep submaxillar gland also in fowl submaxillar. Comparative survey underway.

Isolation has increasing evidence that a peptide is split off from ovomucin by action of RDE on HE. Using chromatographic methods.

Sudan + French find mucovac  destroys aminoacid of mucoids which have no PCCA or F.I.

Action of peroxidase on ovomucin produces well defined sequence of new inhibitory activities  NSE + MMF  series NDV

On sheep submaxillar gland  HEE appears in first stage.

With high concentrations of RDE on ovomucin the inhibition for NDV becomes resistant to RDE. The material containing F.I. naturally or after its removal by RDE can become an inhibiting virus solution.

Action of Ca deconygly agents is becoming of more interest

Virus on mucoid begins inhibition only  RDE on mucoid confines inhibition  RDE on red cells confine inhibition by Colgan  red blood

much less by oxalate + phosphate nil by fluoride.
Redella 3 experiments indicate 1) that virus is present in larvae at time
of the rash 2) that can be stored in CO2 solution for some weeks
3) susceptible to formalin 4) incubation period 14-20 days 5) subclinical
infection possible 6) immunity lasts for years.

to success in attempts at egg cultivation

6 of very young embryos

0-1d eggs can be successfully incubated into yolk and
embryos is killed by influenza H1N1 vaccine. To success with
rubella vaccine or common cold.

December 9th 1945

Pressure of administrative work definitely interfering with output. In addition
fairly long illness - social events + flu operation and try to Perth both
interfused seriously - Lennard Anderson + McCua all overseas in August.

New public address in Perth successfully - Von DSc. Guest of
Horace Falkiner BSc in May. Second edition of monograph was in final
draft and Presidential address + opening discussion on Human conferred
ready for Hobart.

Personal scientific work: Long unsuccessful attempt to grow rubella disease
virus - with Stone + Sydney embryos unvaccinated and unvaccines +
other antigen allowed to hatch and subsequently tested for antigenic
response. Occasional low titre antibody but usually negative. All
so far have given good response to local antigenic stimulus

Among one of this antibody response of children 6-10 weeks
its various antigens is being tested. Response is stubbornly active
and often shows associated active increase in immature plasma cells.

Periodate action on ovoalbumin completed the chief features being appearance of NRV inhibitor. Continued action of LEC despite periodate in association with failure of inhibitor to appear. Inability of RPE to dissociate periodate-resistant virus union.

Postirradiation reactivity of ovoalbumin is lost under RPE action.

Also works in saline.

Ferrothiolate + diiodoiodine on unite action of RPE + MMF and RPE on ovoalbumin: dialysate material contains reproductible amount of reducing sugar and N. No clear evidence of amino acid.

Ovoalbumin contains glycine and methionine component as well as virus inhibitor.

This done has general method of hardening virus indicator by treatment with carbon at 8.5 pH.

Add purifying RPE.

Frydas has got a lot of results on the detailed study of mouse lung infection with influenza virus. Complement fixing antibody is produced only with actual infection and its amount is essentially independent of the dosage or extent of infection. No evidence that it can be produced in vivo.
1955:
- Recombination of 1059 with wide range of A strains.
- Development of quantitative dark ground method for filaments.
- Lyosis or destruction of filaments by osmotic agents.
- Interferon studies - not necessary for recombination.
- Wrote "Interferon and Virology" as a second and third edition of the antibody monograph, also a discussion of the different types of antibody for Murray's forklift.
- Visit to Japan and India.

1956:
- Feb.: Visit to U.S.A. Lecture to Academy.
- June: Action of interferon on virus multiplication in cell.
- Development of and method of handling D.E.
- Suppressor gene producing invertebra.
1957

Jan
President ANZAAS Darwin, N.T.

Mar.
Cancer essay published in BMJ.

May-June.
Visit to England, Geneva for Peto conferences and Stockholm.

July.
Asian influenza epidemic.

Sept.
Man selection theory originated.

Nov.
Rutheberg at Institute - commencement of research on single cell antibody work.

1958

Spring in Nashville, Mar 21st - May 26th.

Harvard lectures at Vanderbilt.

Prepared Cancer selection theory of immunity for publication.

Biology of Cancer at Menoy Harbor - Cullen lecture on hemodynamics at Harvard.

June 12th - Order of March.

26th.
Private audience with the Queen.

Gold medal of Society of Apothecaries.

Nov 22-27.
Geneva WHO meeting of Virus experts.

Agreed to do second edition Principles Annual Virolology.

Member of American Academy of Arts & Sciences.
1959.


"General Selection Theory" published C.U.P. June.


CIBA Anniversary Symposium.

Development of the CAM method for Simonsen reaction.

with S. Rogers.

Trovir memorial lecture Hobart Govt. House.

Eden Beach Gold Coast 3rd vacation.

action of anticoagulants, lift from Major H.W. Hall.

Loss of specificity on passage also key. A. N. Macalag.

Kahns committee in Sydney.

1960


Absence of anticoagulant action on 1st passage, cells.

[illegible]

Preservation of lymphoid activity in nerve by interferon.

Dengue + Wurman Large lymphocytes.


Other disease recommendations. Hotel.

[End of personal bench work apart from histology]
1961

Hynus clones observed in NZB mice.

The influence ofburying clones

Papain treated and agglutinated

Effect of hormone in giving different

effects on Hynus + clones.

Development of the general idea of a differentiation
between surveillance function and defence function.

1962

Failure of Hynus clones to prevent DCT?

NZB influence of spleen donors on renal clones.

Recognition of classification of Hynus by spreading clones?

Rabbits Hynus grafts become involved in other hosts.

Horsed no synthesis of RNA in mature plasma cell.

Hypothetical bacterial infection to cancel.

Possible plasma cell lesion in Kurn Hynus.

Lund + Emes on production of enamel on CMT?

1963

DCT, I.C. and PCA appear to be the same antibody
with differing degrees of avidity.

Genetics of NZB/C3H F1 parasite to Kurn.

Essential genetic factors in the Sh antigen.

History of diffuse similarity of the genes.

Cell + hormonal regulation function.

Commencement of cards for bacterial immunology.
1964
AHA course in body defence (Dundee)
These cell change in NZB agamem
Prague conference presents clinical section
Presented Sydney Sommerville Memorial Lecture.
Book on cellular immunity started.

1965
President Aust Acad of Science.
Inheritance of factors + in NZB agamem
Work on allograft pathology in B/W.
Selection of T-lymph strain with cyclophosphamide
And concept of cellular attack on Acne
Retirement.

1966
Concept of sheath particle segment in antibody
Interpretation of CNS lesions with Ca of immunity.
Chairman Commonwealth Foundation Boyen Lectures.
Italien Lectures Consuland March Group + Salerno.

1967
Freckles as hormonal modulation.
Cell Spring workshop.
Symposium on Antibodies.
Cellular Immunology finished September
Autography started.

1968
Immunological surveillance concepts developed.
Elaboration of theory of evolution and surface carriage of antigen.
Theories paper.
1969.
- Swim surveillance M.S. & Bagemihl
- Cellular Immunology published. 2-4
- Bone marrow began
- Concept of ageing worked out

1970
- Thoughts on virus compatibility antigens.
- Bone marrow published.
- Immunological surveillance published.
- Work on 1st edition NHLD began

1971
- History of Yale Institute published.
- Gene dreams & realities.
- General approach to carcinogenesis - Transpl. Res.
- Self and not self extended to plants, Nature.
- Washington Congress Immun.
- Pacific Science Congress address + Hendelsohn lecture.

1972
- New approach to Autonomy and aging.
- Hendelsohn lecture published.
- Autonomy + Auto immune disease published.
- Edit. Nat. Hist. 3rd Sup. Dies
- Linda in Hospital Oct.

Sept. New Zealand tour with Linda.


Selling the intrinsic mutagenesis story in Europe & America.

Theodora fragmentation

Sept. Intrinsic Mutagenesis published.

Oct. Small to Brisbane & Townsville.


May. Ovarian origin of Ig T clarified.

June: Small meeting ideas at Russian meeting. July Townsville.

August. Send off Immunology. B.A. reader.


Sent off Endurance of Life to Freeman.


Idea of the second sequence in metaphysics.

1977.

Endurance of Life to M.V.P.


Lectures for Weizmann Inst. Left Immunology.
1975. Endurance of Life published - Brief Confined
Visit to Israel - Kalyan Kotelovsky lectures
Switzerland - Baltimore - AR. investment
Macfarlane Burnet Room - Portrait of Influenza
ABC lectures on Aging

1979. Chapter on Organ diseases - Briefs published

1980. "Scientific Gerontology"olah of Aging from Care for Geriatrics
two interest in how in mind to D.C.

1981 Royal Wedding Time and the Pathology of Dementia

1982. The Honors in - Challenge to Australia
The following pages are blank and have not been digitised.
1926 to London SS China
1927-8 return SS Rotterdam
1931-2 to London Callan
23-4 return Medici
1937 Jan Auckland Island NZ [ANZAAS] by ship
1943 Nov - May 28 1944 USA Harvard University
1946 UK by air R S Scientific Conference Lancaster Flying boat
1950 Visiting Prof Hammersmith Coronary Lecture R S 4th Heber Lecture Baltimore Princess of Scotland Congreg
1952 Jewel US Virus classification air Col U.S. Madison visiting prof. Pasadena 7th air
1954 Italy Hamburg Copenhagen London Edinburgh 8th Rome
1955 Steen Sugar Colonies Ohio Armour Annapolis Maryland Baltimore Boston Ohio Annapolis Mexico America
1956 New Guinea 10
1957 Hawaii Cook Island NZ ANZAAS
1958 USA Had Aread UK for RS Finance


1962. Rome Paris Prague [ DNA *Vasa*]

1963. Nov. USA. [San Francisco] [Indianapolis + New Haven La Jolla]

1963. May. USA. [San Francisco] "San Francisco 22+ 13 [14 UK + 9 USA. 13, 21, 29 June 1569]"


Nov. Moscow, Moscow (winters), and others.


Bundu: Moneale, Moscow, etc.


Sept: NC, France, Russia, Stockholm, SF, 29. US cancelled.

Approx 600,000 miles by sea.

1970. Via Queensland, Australia, New Heads + Alexandra Hall.

1971. August: Washington, DC, Queensland, Australia, Heads + Alexandra Hall.
1974.  April 15 - S.F.  to Yale  Rockefeller  N.Y.  Harvard  Brown  Study
      Basel  Lausanne  Freiburg  Stockholm  Copenhagen  London
      Oxford  Angus  Aug  1st  Cowesville  0 in October
1975.  April 2 - July 2  San Francisco  Irvine  L.A.  Tucson  (Arizona)
      Southampton  London  Cambridge  Birmingham  Dublin  N.E.  Finland
      Paris  London  Tenerife  [2]  [ira Bona.  Longchamp  5 pm]
      [Flying estimate 470 000 miles of flying]  [Cowesville in July]
      New Zealand  V.S.  16 out White & Red Cruise
1976.  Sept 12 - Nov 7th  Frankfurt  Vienna  Athens  Istanbul  +
      Budapest  +  London  Oxford  Washington  Toulouse  Williamsburg
      Grand Canyon  San Francisco  [33]
      Kuala Lumpur  [33]  Four Buckingham Palace
      Amana  Geneva  Zurich  Baltimore  Washington  San Francisco  Honolulu
      Kona (Hawaii)  [34]  Western District  Holiday (3 days)
1979.  No trip overseas
1981.  No trip overseas  1983  Rome
1982.  New Africa  London (Hanoii, etc.)  Jaunto Windsor Castle  for
      O.M.  luncheon
1984.  Charleston  May 14 - 28  M.O. 53th  degree  Yorkville  [27]
1925 BMA prize Steward.

1942 Barcroft Bantin (Budwey) F.R.S.

1944 Gunston Echlin Howard.

1946 Sc D (Cambridge) 1947 Royal Medal R.S.

1950 Visiting professor Hammersmith Grosvenor Echlin R.S.

1951 Visiting professor [John Hopkins] 1951 KT.

1952 Visiting professor Madison. Galilee Graham Foster Award.

1954 won Belang Prize for 1952.

Price Echlin for Assn. had Aced Sci.

James Cook Medal.

1957 President ANZAS Hon DSc NZ.

For membership Swedish Academy.

1958 O.M.

For membership Acad. Arts & Sciences.

Gold Medal Soc. Apothecaries.

1959 Copley Medal R.S. Pastemew Institute Medal.

Fellow of the Royal College of Physicians.

For membership American Philosophical Soc Hon DSc Howard.

Hon DSc London. Henders Echlin RA Se.

Shared Nobel Prize for medicine.

1961 PM's acceptance of portrait train of the year.

Reelected Honorary Fellow.

Sir Hugh Echlin 2nd order of Rising Sun Japan.

1962. New York University Medal
Japenese lecture RSM. Hon B.A. Melbourne.
Thurles medal ANZACS.

1963. Elk billy lecture American College of Physicians
Hon fellow A.C.P. American Pediatric Society
James E. Tecchie. Hon Fellow. Alpha Omega, Inc.
Moles Graham RACP. Roscoff Prince Feidberg

Cancer Soc. lecture Philadelphia 7th Ann Nancy lecture [Pittsburgh]
Fellow American Post grad sec.

1965-66 President Royal Med Sci

1966. Hawton Robinson Medal of Childrens Hospital college
Chairman Commonweath Foundation. Hon Fellow Institute of
Biology, Hon Member Amer Soc to Feidberg

Canadian Bernard Merle University of Montreal. Therriender
Honorary at Expo '67

1968. D.Sc. (Oxon). D.Sc. (Sherwood) for president of

Pres. Internat Assoc. Human Fisicos. 70th Birthday Seminar.
1975. Awarded "Fink" Australian award
1978. A.K.
1979. Best by Bonnet, Plaque "Meszaros"
1980. Best by Commonwealth: Dinner with Queen at Canberra.
"Peace" Award Research Scholarships (Vic. Dept.)
W.S. Fialy lecture George M.S. NY.
1981.
1982. French Medal Endurance of Life: OM lunch Windsor Castle After Queen meeting
The Mackay.

Hermet
Zygmang
Warner
Sonne
Del.
Kornman
Albert
Melcaff.
T R Mackay

G R Cole

Heath, Ronald

J Page

Dolley

Carlson Leydward
Stock
Lim

Wally Spector

Sparkes.

John Lederberg

Taft.
Australia

Melbourne, Sydney, Perth, Adelaide, Brisbane, Hobart, Canberra

New Guinea, Port Moresby, Honiara, Suva, Auckland, Darwin

Asia

Tokyo, Kyoto, Yokohama, Hong Kong, Singapore, Calcutta, Kandy, Nagpur, Madras, Poona, Bombay, Delhi

Europe


North America

Philadelphia, New York, New Haven, Boston, St. Louis, Minneapolis, Chicago, San Francisco, Los Angeles

South America

Caracas, Sao Paulo, Buenos Aires, Lima, Santiago, Montevideo, Rio de Janeiro, Lima, Quito, Bogotá, Caracas

North Africa

Algiers, Tunis, Casablanca, Dakar, Accra, Tripoli, Alexandria, Haifa

South Africa

Johannesburg, Durban, Bloemfontein, Capetown, Pretoria, Kimberley, Kimberley, Kimberley, Kimberley, Kimberley

Africa

Tangier, Fez, Casablanca, Khartoum, Cairo, Alexandria, Tel Aviv, Jaffa, Haifa, Jerusalem

Central America

San Salvador, Managua, Havana, Panama, Guatemala City, Caracas, Bogotá, Lima, Quito, Guayaquil

South America

Buenos Aires, Montevideo, Asunción, Santiago, Lima, Quito, Guayaquil, Guayaquil, Guayaquil, Guayaquil, Guayaquil
Moscow Kirovgrad Stockholm Copenhagen.
1966 Altona Würtzburg Lausanne Versailles Helmsel.

Vienna Budapest.

Africa Cape Town Dakar Johannesburg Entebbe.

1975 [107.500].
1974 115.
1975 120.
1976 172.
1977 126.
Countries

UK, Can, Aus, NC, NR, S. Africa, India

USA, Fr, C. I. S, HK, Denmark, Cz, Su, Ru, Swe, Dan, Fin, GR.

Jap, HK, Sinc, Eng, India, Malaysia, 1969

Israel, Hung.

Countries visited without declaring:

Hawaii, Thailand, B. Balam.

India, Iran, Turkey, Yemem, Egypt, Iraq, Saudi Arabia, Jordan, Marroco.

Arres to Burma, Indonesia, Thailand, Norway, Australia, Fiji, Philippines.

Total visited 1975 (49 countries visited) after Hungary.
MacKellar (Jimmy McDonald, Nelson). Fraser.
Royalty George VI. Blight Queen Helen Queen Prince Philip.
Hussein. Gustav (Sweden) Charles.
Library. (Comes Wells) Hoole. Marjory. (B Russell)
51 John Place.
PEOPLE

Doan
Dwight Ellers, Teacher, UWA, Sec.
Daryl Bradby & Barry, New smearscopy, Glenmore
Dolls & Jon. Sennan
Nanam McConnell, Dentist.
Irrege, Skilful Oils Photographer
Peggy Adam-Smith, Librarian
Dr. Appley of Tonang Clinic

Jackson (French)

St. & Mrs.
Prof. Roger Russell & Thane, Medawar man alone.
Brian Fiery OSH. Guild work on EPDP.
Alastair Cunningham Tang.
Richard Artuski

Shorey.
Eisenvam Hospital

Chuone del, Reader. Hoang. Deputy, Brockman. CHANG
Huang Ping-Wei, CHANG Lung-Hsiang.
Li Ming-Te, Interpreter, WANG, Acupuncture.
Miss Burnstock (Nursinggency)

Colin Gilmore, Prof. Schreiber in Freising.

Vera Parnes, Mccas.

Abraham Vranchise.

Joel

Dr. Wilhelm, Pat. de Burch, and Wally, Newcastle.

Robin William's.
ANDERSON: Principal of Park Hall. Mrs. HAYE. I'm ROGER.

Ruth and Rosemary Gayme. Dr. Farrer, Rosemary Gayme.

Mrs. Fraser [Makara Forest].

A.M.O. David Warner was manager. Jim Anderson.

Bruno Barrie. Pete Deahan.

Henry Jenkins, run Foresta. Self-made stone mason in

Sawyer's quarry. ABC, Cornwall Theatre. In about 1957

died within a year married Gordon Smith, who I gather is in

Newcastle & H.T.

Geoffrey T.A. suggested $25,000 for research gold acute.

Dr. Max Harebowie. Metallurgy with E.A.

Rohyn Carter. Liberal student at Halwood.

Erma, Bob Dwyer. Ron Sundberg. Andrew Wood.


Richard Robertson.
The following pages are blank and have not been digitised.
59-46  FMB  Foley  V. Rudd
60-41
61-42  Bulk  Nagler  Beveridge
62-43
63-44  Stone  and
64-5
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67  11
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95  17
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Endowment

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22 (2500) 44.50
23 (1500) 3900
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25 5100
26 £100 5000
27 6100 10100
28 7400 10400
29 10200 16400
30 8500
31 7200
32 6600
33 6100
34 6900
35 6000 10600
36 48500 14950
37 10400 14850
Antibody response in relation to O mice.

Using pure O mice simultaneously, bleed immunized C5Hg mice of mice intravenously. Rpt at 1 week.

Use D mice similarly.
Explosion of mammalian disease grown in eggs.

Is there any virus available on a suitable reptile animal which will not grow in eggs?  
Foot and mouth, rabies, poxmyelitis, contagious pustular dermatitis, 
Confuse.

December 1946.  
Idea along the line of microorganisms tissue cell relation.

RDE is significantly lessened by normal serum but it might be able to combine with endothelial product if used say for lung perfusion.  Can any human Razar-Haemagglutin be detected in staphylococci, particularly those grown in alcohol?
Account for 1942.  


Sales from 9 to Jan 14.  [124 10 5 30 92.]

Remitted: Aug 1942.  

£ 6.12.  1/6.  £ 7.2.6
May 1944

Insecticide ideas.

Screen study of MEF on basis of O-type aggregation

Is it a suitable managing agent for mice or not?

Feel of blockage immunity in mice by mist challenge methods.

Induce respiration as preventive agent.

September 44

In my work, following in detail: Supposing that small amounts of vapour
had an active effect on droplet fever would this be of practical value.

Advantages: Has potency with no necessity for elaborate apparatus.

Rusted idea with increased V.P. body heat might be useful.

Disadvantages: Slight corrosive effect on metal.

Experimental: An saturated battery solution on lid as source of vapour.

 Pawn frames be protected against contact escape.

Use isolation room for ger with electric fan. Mice in adjacent

rabbits cages.

House set-up: Gas-proof containers off 2 cubic ft.

Glass door for insertion of mice. Entries for mist and gas mixture

Sampling tap. Invasive fan. Hermetical wrap body to control damp

work is valuable. Lee Wright
Botanical Aspects of Infectious Disease.

Accounts to Dec 31st 1940

[Handwritten text]

[Continued text]

Account from Macmillan's N.Y. Sales to Apr. 30th 1941 251 (at £1.35) £94.13.
Received from Shell, Nov. 6th 41, 90% paid Nov 28th
£94.13 X 90% = £84.70
27⅞% = £34.70
£69.40 = £16.17.8

Commission £2.6.6.

[Continued text]

Account Cambridge April 1942 covering 1941 (sent to me by accident)

[Continued text]

[Handwritten text]
Rate of spread of virus in mice.

Combine histological and virus titration of different areas, first at 7 days, or as soon as temperature up.

Possibility of certain similar experiments in mice.


1) Development of familial degree of adaptation by end titration method.

Examine both atactic and amotic passage series.

Possibility of change in embryos occurred very late and then limited.

Use direct pathogenicity for mice. F1 ratio and more mouse cell tests.

2. Atactic conditions of ascites.

A few more representative cases in B murine used, subject to mouse comparison.

Escherichia coli strain of S.3, K 12, K 96, K 94 mice pairs.

3. Histological differences in course of adaptation from C type.

Inoculate pancreas with high dilution of C fluid. Work out at 5 days.

To determine whether type B detectable. Presence serum.

Inoculate guinea pig 10 with adapted and unadapted. Test serological activity.
Human inoculations

Try out hash 40th passage + W.M. and W.E.

For next series three consecutive daily inoculations.

Dec 1942.

B vaccine is probably satisfactory; concentrate on A of mott. type. Store 4C adapted passages in CO2.

Get full details of virus given American 9-11-42.
Further lines of work on influenza.

Simian transplants: Does the antibody response of specific type, especially does antibody act on virus virus?

Is animal a possible means to dealing antigenicity of contemporary human strains for immunization.

Response to repeated reinfection with particular reference to heterologous strains. Does the monkey possess V.1.19? Action of V1A resistant strain if obtained.

How far down the bronchial tree can the virus be found.

Significance of V.1.19.

Repeat attempt to obtain V1A resistant strain using amniotic method and a mixture of all the available viruses.
Biological and Epidemiological Data: Jan 31


8-5-29. Acute one day illness with some tonsillar reddening. No phlegm.

no fever agent in gagging

35-37 C stead. No patho antibody.

TN M.E.F. 0.017% U.S.E. 0.0067%.
Other methods of inoculation of embryos + applications

Details of pathology of influenza with amniotic inoculation

Histology of lung + trachea.

Evidence of infection by this means with other respiratory viruses esp. e. cord.

with subsequent death on newborn. Treating also.

Pathology of influenza by some method are presence of I H3.

Intracerebral inoculation of polio virus "man" also amniotic.

Can pharyngeal lesions be detected with Levin polio and Campyrella.
Does feeding with S.I. turn red blood canes make immunizing agent.

Use 0.1 ml. in 96 eggs.

Section of standard egg membrane.

Can any neutralization be shown with immune foot serum.

Is the difference between GP response no egg and morse material due to the presence of antibody in the gallus.
Obtain a further supply of coke saliva to see if effective inhibition tests true test.

Preparation with蜃藻 is needed 2 year gas.
Pseudomonas

Examine the potentiality of using mouse lung for test of immunity and for contrast of pathology with a true pneumotrophic virus.

Elaborate the possibility of using lung lesions as a fourth clinical type of infection.

Chemotherapeutic experiments with MB 672.

Guinea pig immune serum against lung virus.

Possible test of whether or not purified pseudomonas virus shows respiratory or gyrase activity.

Methods of active immunization by formalin virus intranasally and by subcut injection of living virus.

If chemotherapy fails in normals well it function in basically immune mice.

Activity of pseudomonas in chick embryo lung.

Histology: dilatation of amniotic fluid by mice intranasally: any evidence of from another than HCN body.
Possible lines of work:

4-10-39... of pandemic flu appeared. The necessity could be to provide very rapidly large amounts of a polyvalent virus of low pathogenicity.

These only would probably be of more value than all membranes alone.

To determine at what stage of development the highest virus concentrations are obtained: what is the most suitable technique for storing and distributing vaccine.

The other viruses which might be needed at short notice for preparation of vaccine are I.R.T. + Newcastle disease. Yellow fever + equineencephalomyelitis.

In such a study opportunity to detect embryonic organ-tropism and the amount of virus produced by unadapted flu strains could also be studied.

The infection of animals with low grade neuropathic viruses while they are under anaesthesia e.g. nembutal or skel. Consider possibility of pellet implantation. P.ill and keeps in rats with virus to eventual test of fowl.