

In memory of
Arpad Janos Puzstai



INTRODUCTION

- Retired for 10 years
- The work I will show was completed between 1986 and 1998
- The slides I have chosen were selected from a heap of material cleared from my room in the Medical School in 2013

ARPAD FLED HUNGARY IN 1956

- He chose to come to Britain whereas his fellow refugees went to USA
- He completed a Ph.D. at the Lister and was appointed to Rowett
- I first met Arpad and Susan when they came to my lecture on Diabetogenesis at the Medical School in 1985

Arpad's interests

- Arpad had access to the Budapest Opera House as a student
- He knew all Mozart's operas by heart
- Arpad had an enormous collection of opera records
- These were boxed sets and included several historic recordings by Callas
- He had quality Hi Fi equipment and I was keen on good sound reproduction

Arpad's hobbies

- He was a keen skier and usually skied in Glen Shee
- He drove there in his much loved Sunbeam Talbot car
- Arpad had an amazing collection of fine Whisky
- His favourites were the peaty Islay whiskies

Arpad's "black hole" in Balaton

- Arpad and Susan naturally wanted a home in Hungary
- Balaton was their favoured location about 2 hr from Budapest
- They bought a beautiful villa that had been a vinery
- Arpad called it a financial "black hole" but they grew vines and made wine

Arpad sought help with tomatoes

- Arpad and Susan asked me for help with localisation of tomato lectin in rat intestine
- Lectin binding sites were visualised with peroxidase.
- Arpad provided anti tomato lectin antibody
- Tomato lectin binding sites also localised with EM
- Arpad well pleased with results

Tomato lectin results

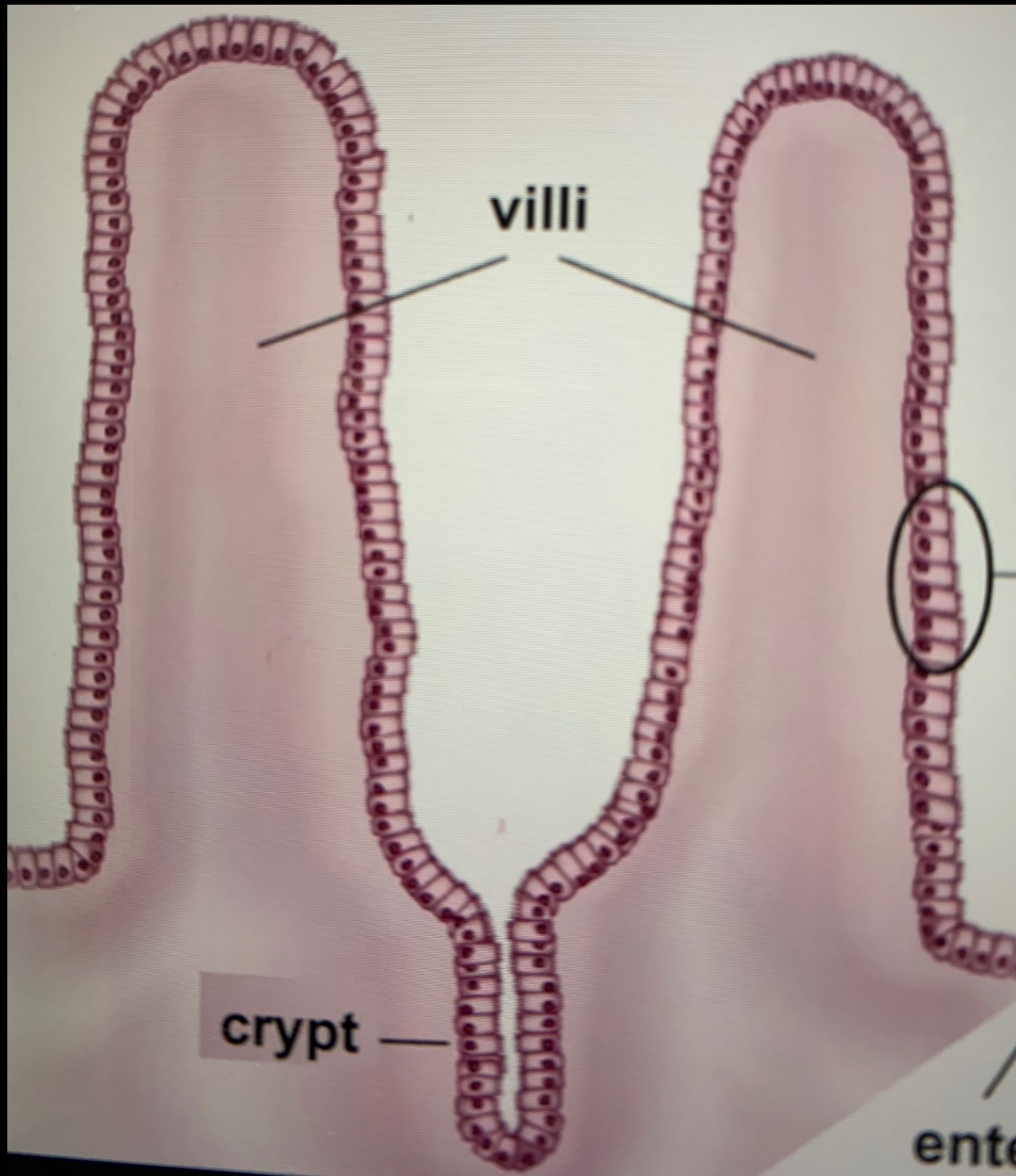
- Arpad appreciated the localisation results
- Invited to Arpad and Susan's home at Ashley Park to discuss results and for a meal - this was the start of a long friendship - 35 years
- Also present was Dave Kilpatrick

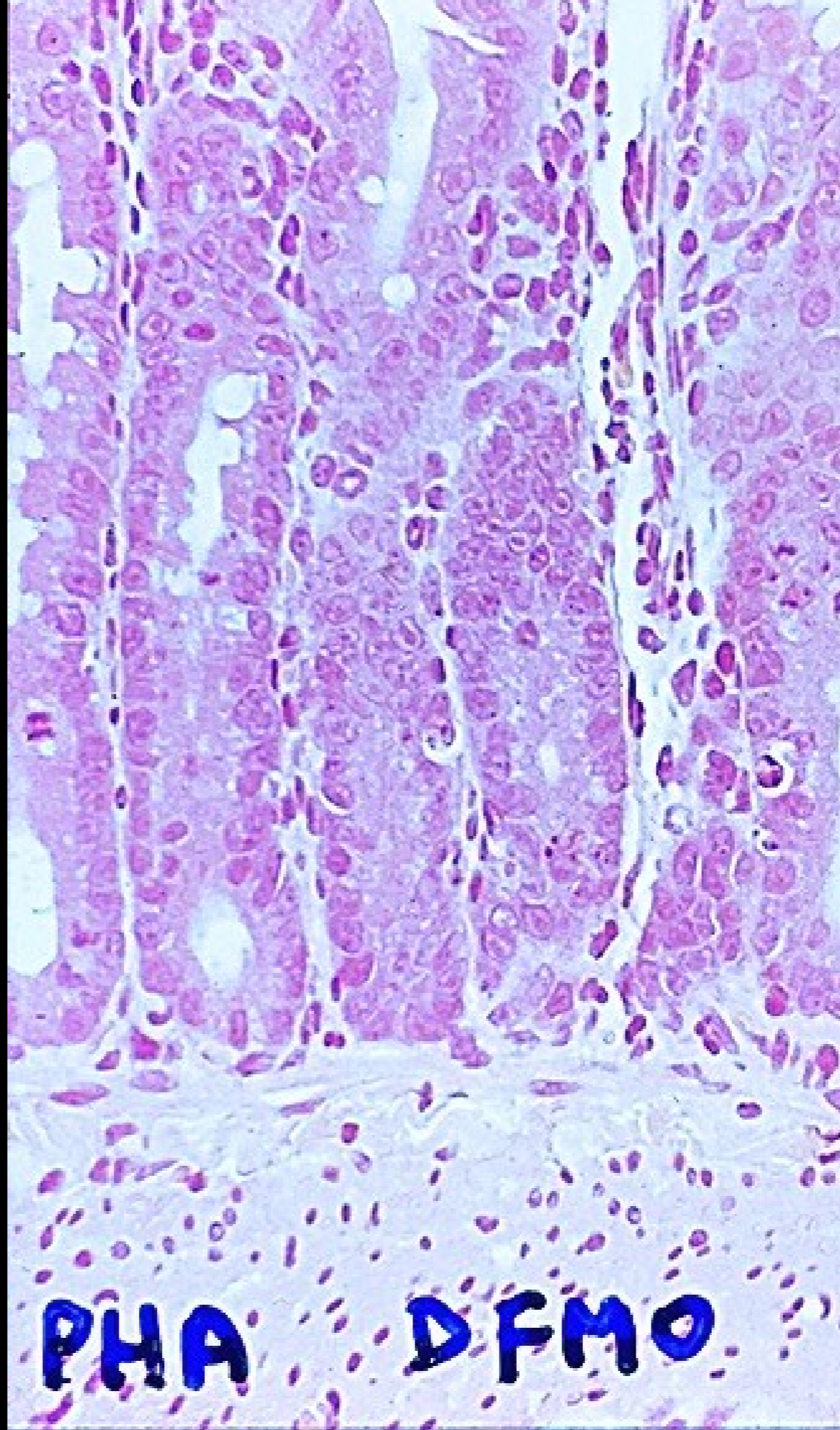
Laboratory procedure for all experiments

- In the animal house, the group consisted of Arpad, Susan, myself and George
- Arpad cleaned the intestinal samples, my task was to orient each gut sample prior to fixation,
- Susan took many samples for analysis and George handled the animals and measured gut length and weight
- Samples always at same distance for all experiments

Arpad and PHA

- For many years Arpad had an interest in PHA
- My first collaborative experiment with his group was histology of rat gut
- PHA caused massive crypt cell production
- This cell growth could not be blocked by DFMO





PHA DFMO

Galanthus Nivalis lectin (GNA)

- Mannose binding lectin
- No binding sites present in normal rat
- Continuous feeding of GNA for 10 days induces binding

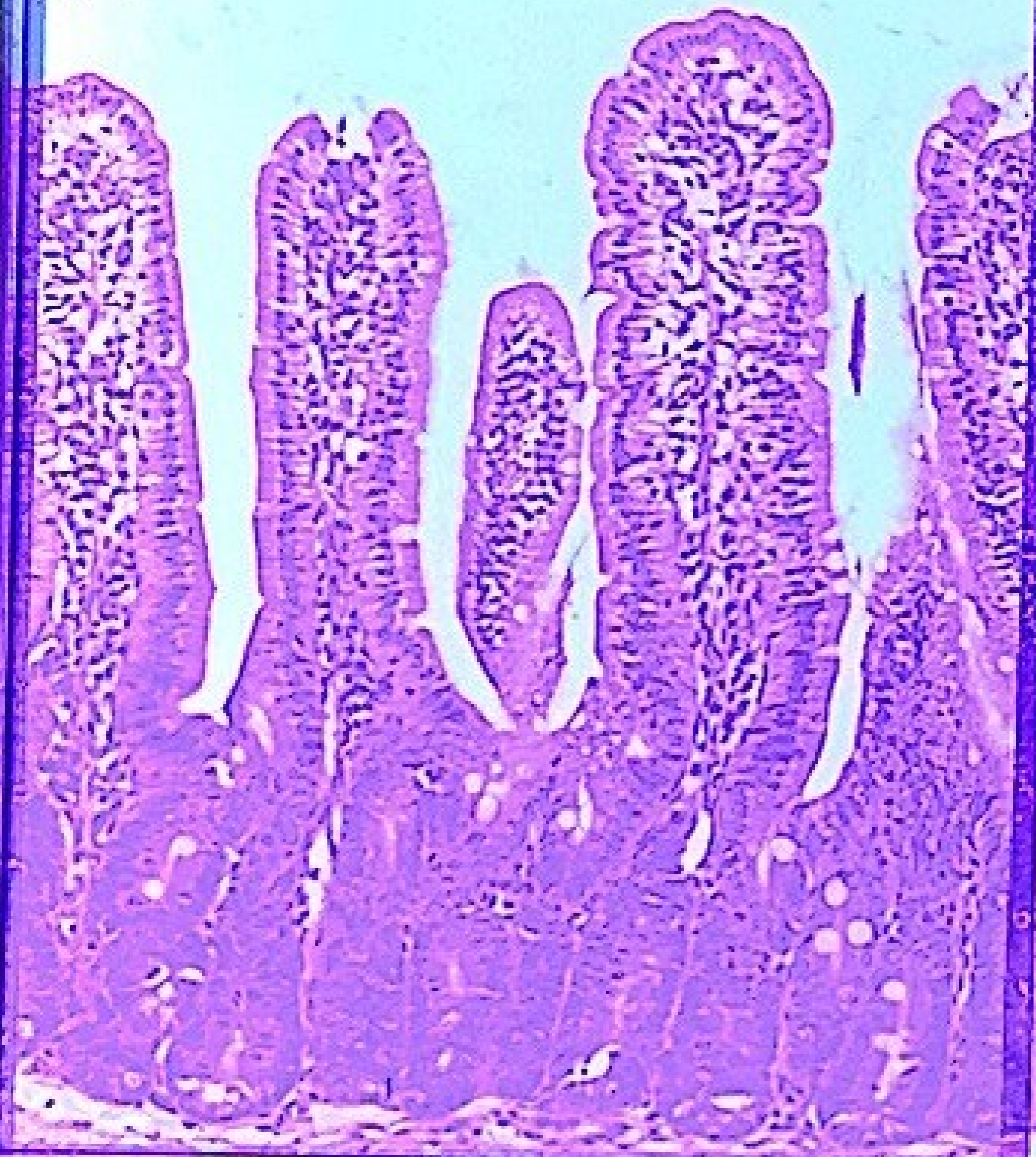
Mistletoe Lectins

- Mistletoe leaves and berries contain anti tumour properties
- The leaves contain at least 3 lectins
- The Biochemistry Dept. of Witten University extracted the lectins
- Asked Arpad to examine their biological effects

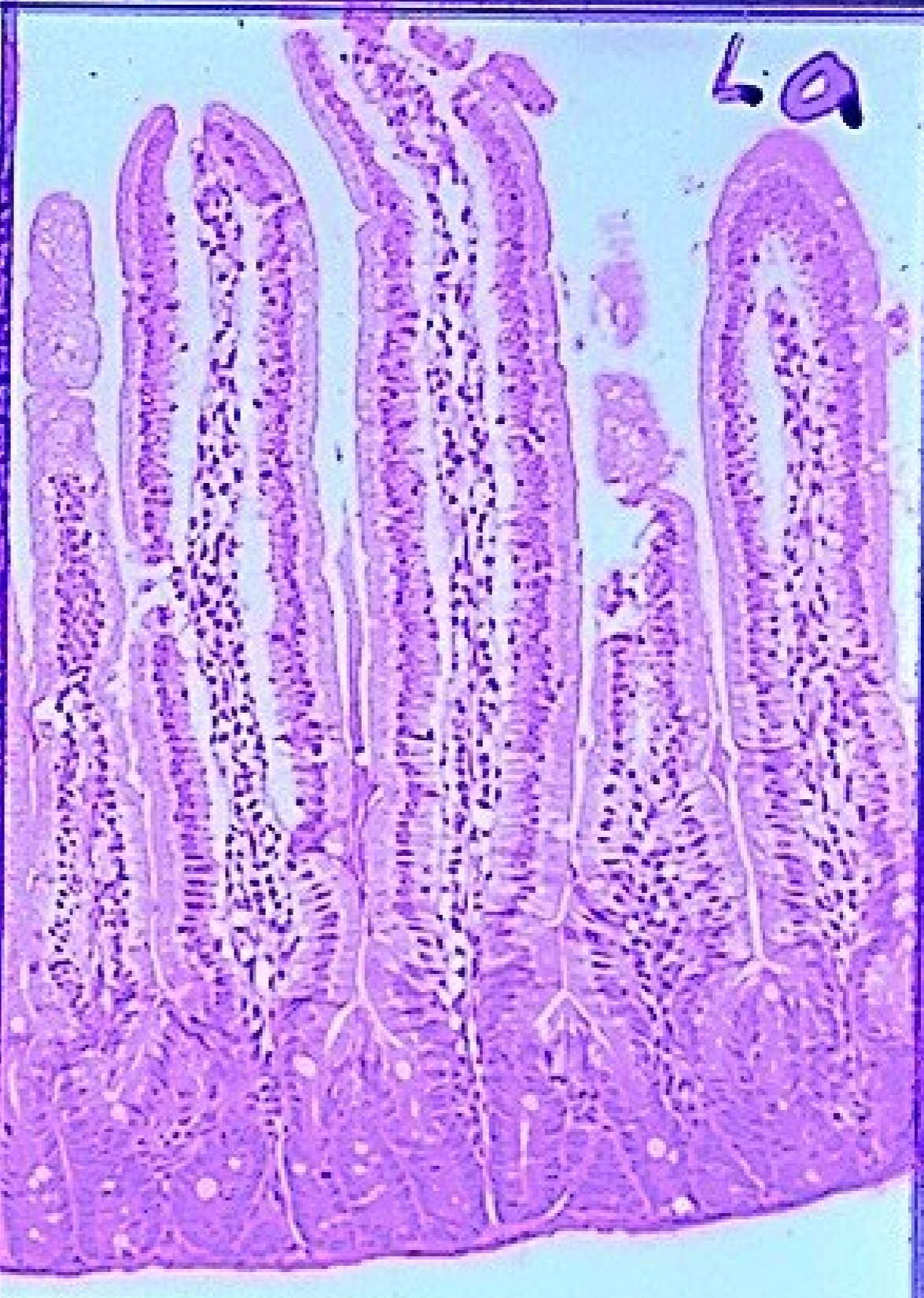
ML 1-3

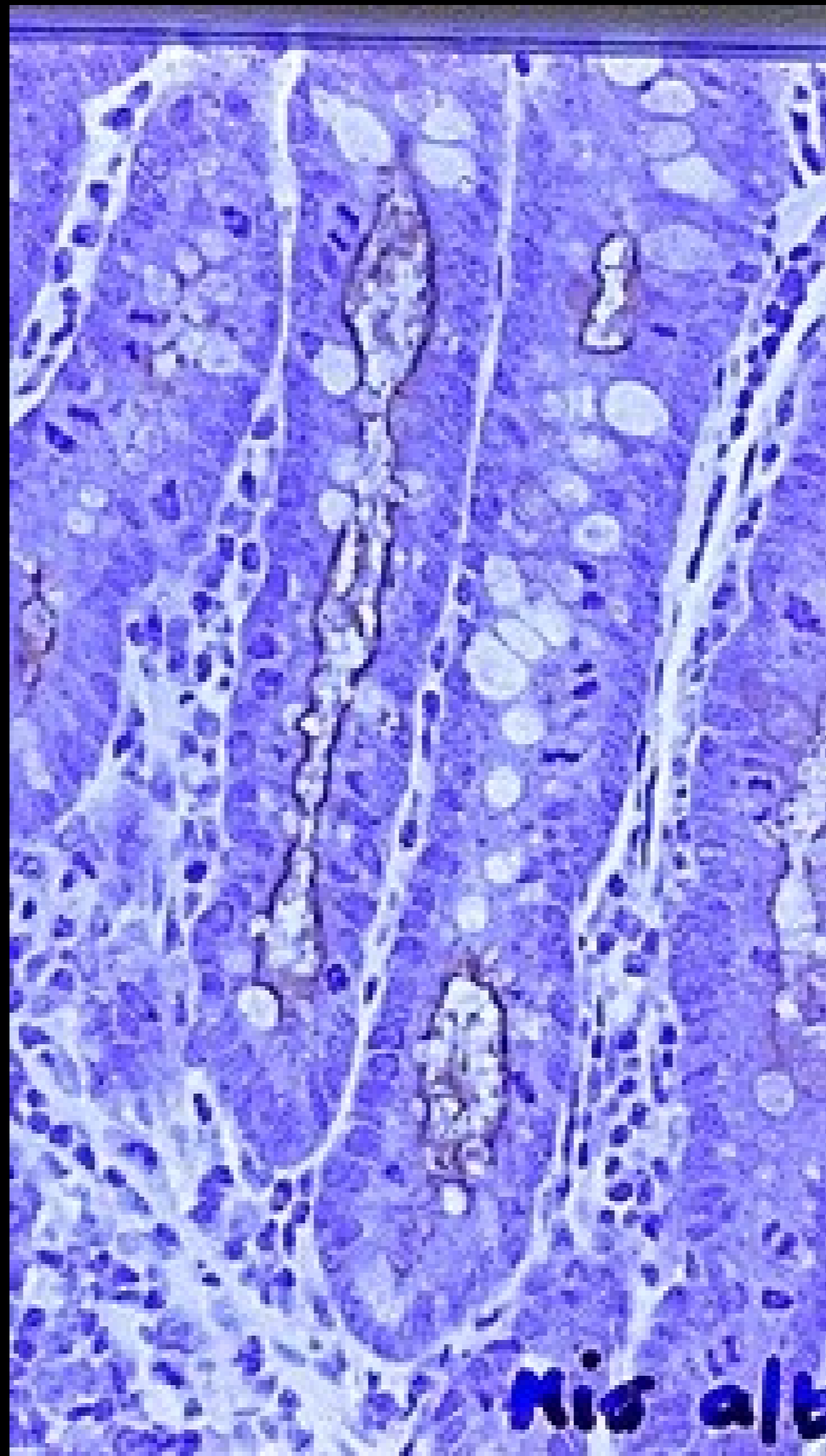
- Feeding ML1 to rats produced crypt hyperplasia
- Arpad wanted collaborative experiments
- Prof. Ian Pryme (Bergen) agreed to mouse trial
- The model was injected lymphosarcome

M



La





ML effects on murine lymphosarcoma

- Murine lymphosarcoma maintained by Prof.Pryme
- Samples collected in Bergen by Arpad and Susan
- The growth of lymphosarcoma was attenuated by ML1

Scot. Agri. Environment and Fisheries Dept

- SOAEFD recognised the complete lack of safety testing of GMC
- Grant applications were invited
- Arpad's proposal won out of 28 proposals
- The grant was for 1.6 million pounds

GM potatoes

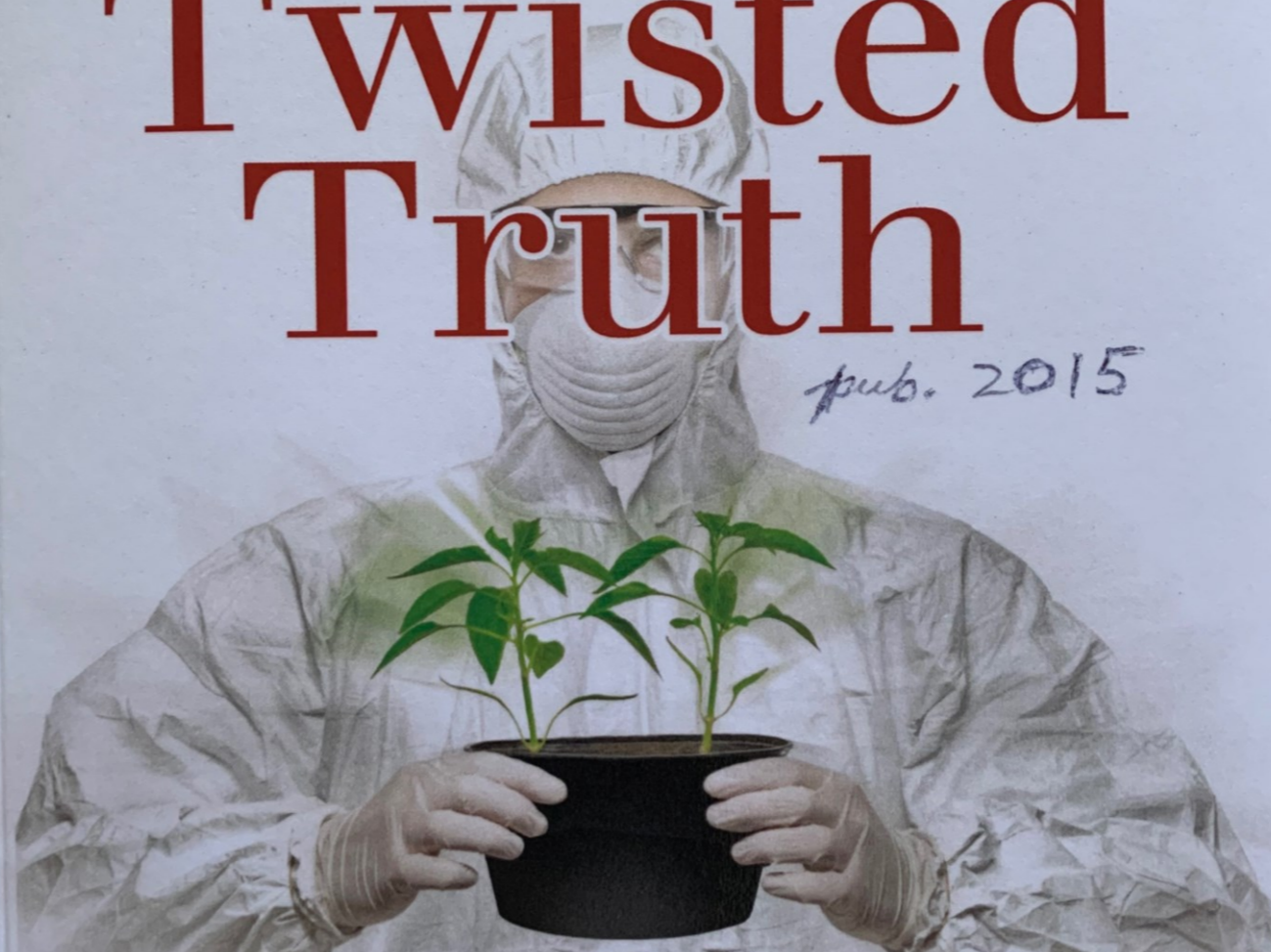
- Ingested GM potatoes produce histological changes in bowel
- These changes were reported to Select Committee (Hansard)
- The Lancet published the changes - no histology
- Pusztai suggested that GM potatoes appeared to contain a growth factor

“ Punish the messenger who brings bad news”

- Praise went to disgrace overnight on 12.08.98
- WHY?
- Daily Mail (2003) Sir Tony Blair is believed to have interceded at the suggestion of President Clinton
- The Director cancelled Arpad's contract
- Pusztai was “gagged”

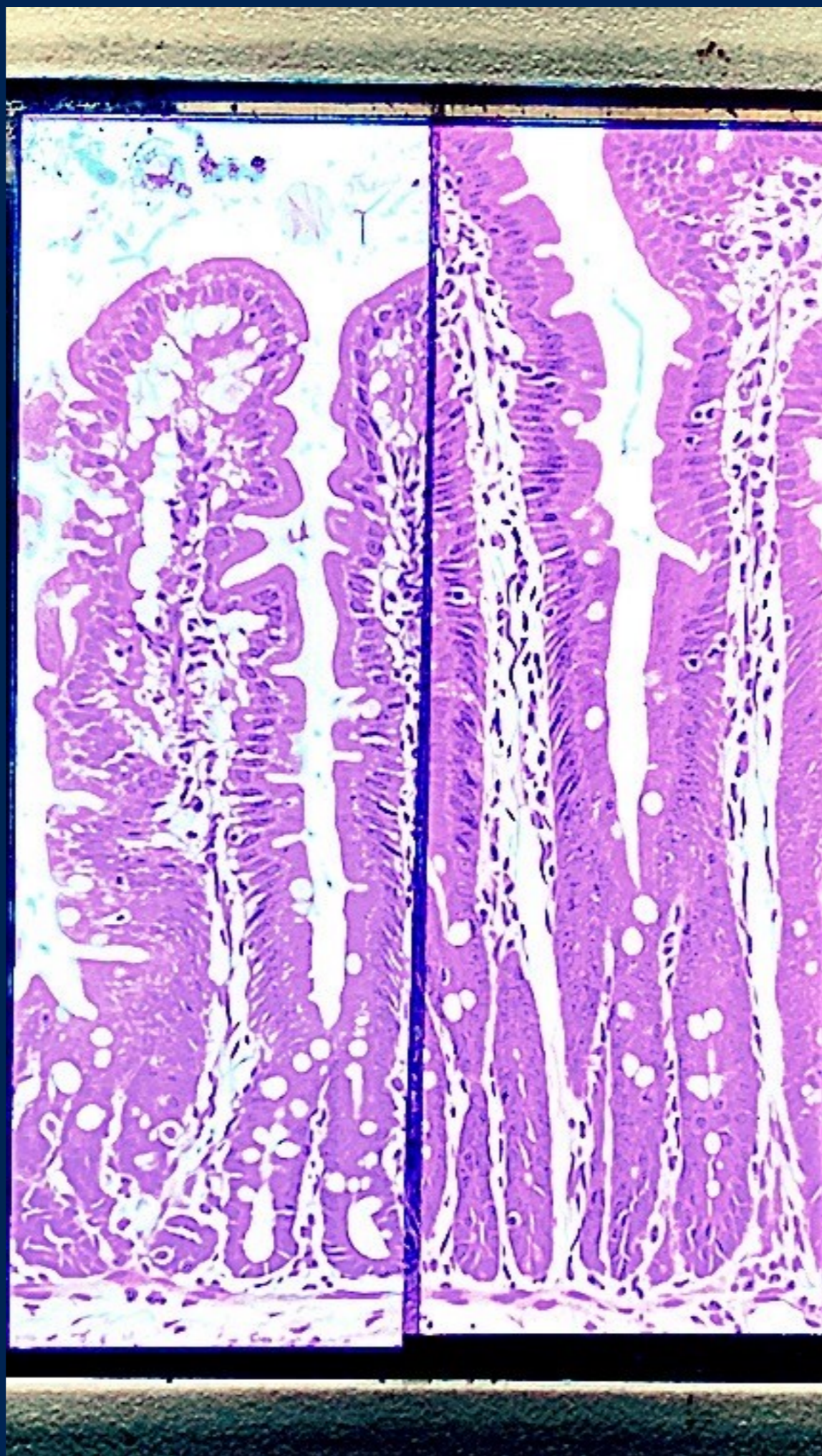
Altered Genes, Twisted Truth

pub. 2015



How the Venture to
Genetically Engineer Our Food Has
Subverted Science, Corrupted Government,
and Systematically Deceived the Public

STEVEN M. DRUKER



Was Arpad affected by this disgraceful outcome?

- Yes very much so!
- Arpad's health was severely jeopardised
- He complained of symptoms consistent with IHD
- His pulse became irregular suggestive of atrial fibrillation

Hungary holiday

- Arpad and Susan eventually returned to Balaton
- While working on a GM manuscript, he became semi conscious
- Admitted to hospital - dense stroke in left middle cerebral artery territory

Returned to Aberdeen with difficulty

- He had complete right hemiplegia
- Susan employed a carer - Katica very supportive
- When we met up several days after his return I was horrified by his lack of speech
- He could hear but could not reply
- We were able to go out for a meal or to a concert

Subsequent progress

- Arpad was very well looked after by Susan and Katica
- He never recovered power on his right side
- After a fall he was hospitalised for 12 weeks and got Covid
- He returned home after care in a local Nursing Home

- Despite Susan's loving care he died in December 2021





