

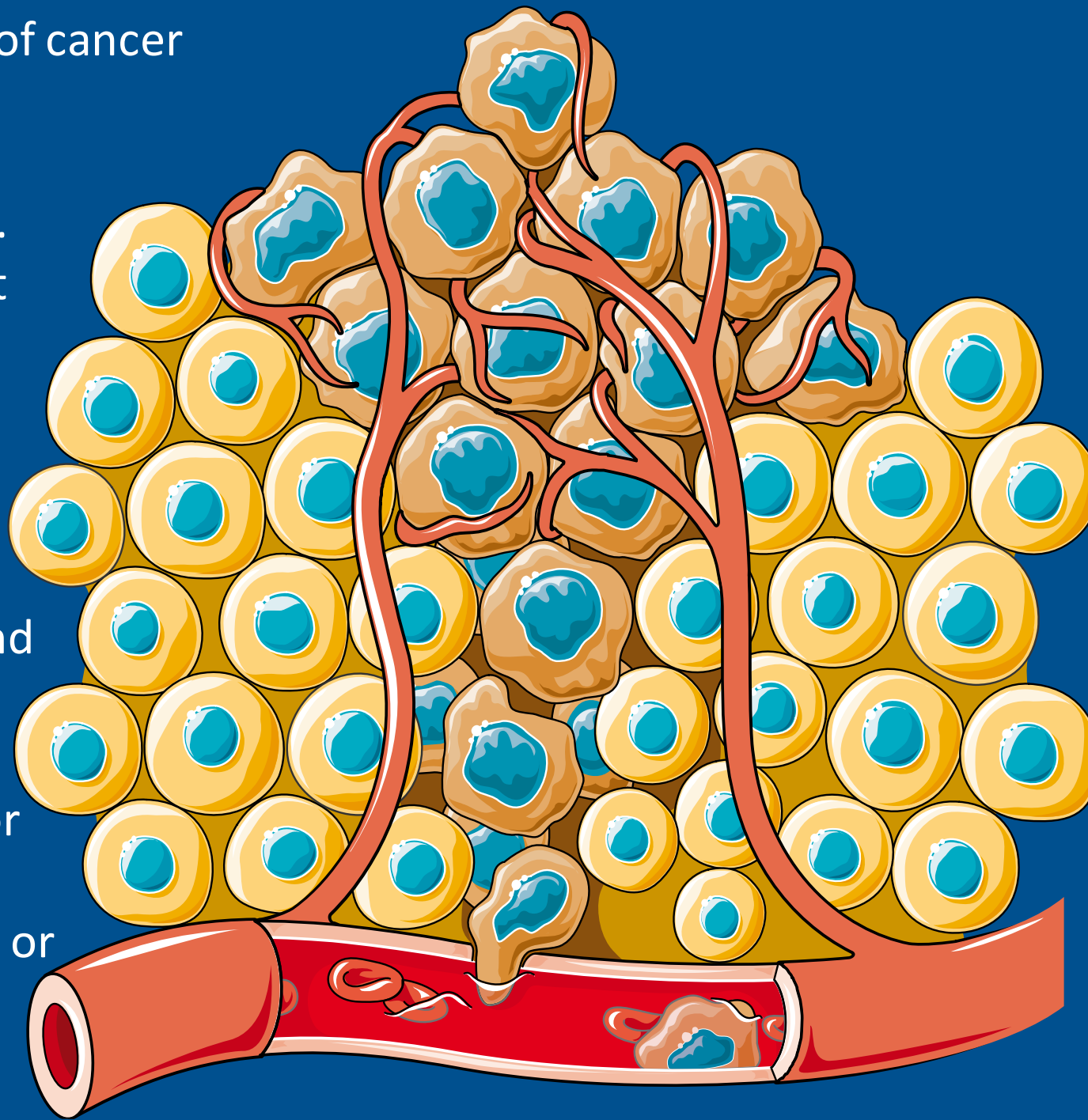
# CANCER 101

## In New Zealand

- One in three people die of cancer.
- Every year there are 18,610 new cancer diagnoses and 9063 cancer deaths.
- Lung cancer causes 18.2% of cancer deaths.
- Breast cancer is the most common cancer in women.
- Prostate cancer is the most common cancer in men.

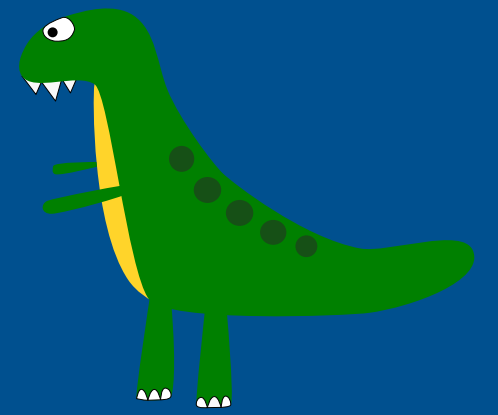
## How Cancer develops

- Mutations in oncogenes and tumour suppressing genes result in uncontrolled cell division that leads to tumor development.
- Mutations can be inherited or can develop over time.



## Interesting fact

There is fossil evidence that shows there were tumours present in dinosaurs.



## Risk Factors

- Alcohol
- Carcinogens
- Obesity
- Sunlight
- Tobacco

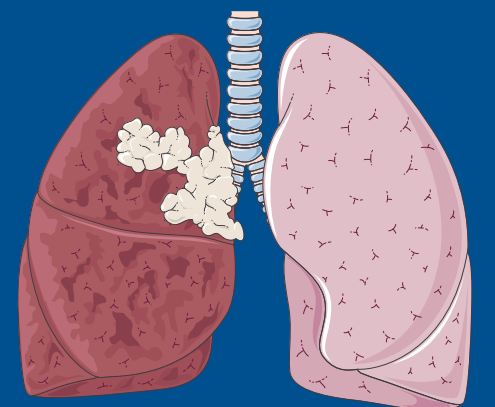
## How Cancer Kills

- Cancer depletes the bodies nutrients.
- Tumours can block nutrient absorption.
- Cancer may decrease the lung's oxygen intake.
- Lungs can collapse and get infected.

## How Cancer Spreads

- Metastasis is the spread and growth of cancer cells from the original tumour site to another site in the body via the blood system or lymphatic system.
- Metastasis is the main factor that leads to cancer deaths.
- The likelihood of a cancer spreading depends on the type, aggressiveness, and stage of cancer.

- Cancer can prevent the liver from maintaining chemical balance.
- The bones can break and not heal.
- Cancer can prevent immune cell and red blood cell production.
- Cancer in the brain can induce comas and lead to death.



## Study Biochemistry at the University of Otago



### Entrance

NO school subject required!  
NCEA chemistry and biology recommended.



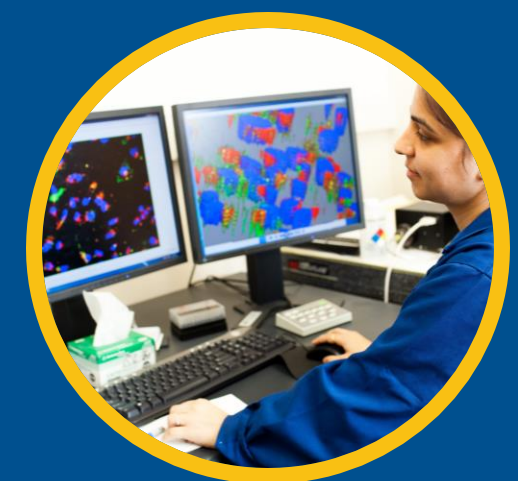
### Undergraduate

Study biological processes; understand the structure, function, and development of life.



### Postgraduate

Conduct research alongside experienced, award-winning teaching staff.



### Careers

Develop new drugs, improve crops and food, and invent new biotechnology.