

## UICC Fellowships: Spotlight on Cancer Prevention, Early Detection and Diagnosis

UICC have been awarding fellowships on cancer prevention, detection and early diagnosis since the 1950's. These fellowships include studies exploring the environmental and behavioural risk factors linked to cancer, as well as the development of cancer vaccines. In addition, health workers and pathologists have been given the opportunity to learn key screening and laboratory techniques to support early detection and diagnosis. The fellows below outline how their fellowships have helped their work.

### Supporting National Screening

To support the country's new national cervical screening programme the State University of Medicine and Pharmacy in Moldova is establishing a centre of expertise that will provide ongoing training for Moldovan pathologists and pathology residents to ensure the accurate diagnosis of cervical biopsies.

In September 2016, two pairs of Moldovan pathologists visited institutions in Italy and the UK for advanced training.

**Dr Pretula**, one of the pathologists, explains *"We wanted to acquire the knowledge and skills to be able to diagnose material from cervical specimens and use this information in a clinical setting to function as local experts in cervical cytopathology and screening."* He said *"Upon our return, we exchanged our experiences with the two fellows who visited the UK and presented our findings to colleagues. We have given presentations to young doctors and pathologists and a workshop is soon to be given by cervical pathology specialists from the Royal College of Pathologists in the UK."*



**Dr Foca** said *“The Moldova State University is now working to institutionalise the new knowledge and skills acquired by these fellowships by incorporating them into the gynaecological pathology residency curriculum.”*

### **Getting the right diagnosis**

In June 2016, **Dr. Rajan Duggal**, a histopathologist from Haryana, India, studied immunohistochemical techniques used to diagnose poorly differentiated genitourinary malignancies at Johns Hopkins Hospital, Baltimore, USA.. Dr Duggal commented that *“The fellowship gave me the opportunity to learn from a world expert, Prof. Jonathan Epstein. I learned of two prostate specific markers crucial in determining the prostatic origin of a tumour. In my home institute, we were using basic,*



*rather than specific, markers and may have therefore been misdiagnosing these cases. Using these specific markers will now help in the early diagnosis and early institution of therapy in poorly differentiated malignancies. I want to thank UICC for supporting me in this and I will surely be able to implement these skills and education in my home country.”* [Click here to read Dr Duggal's](#)

[testimonial.](#)

### **Measuring the Impact of Tobacco Control measures**

Over the years, the **International Agency for Research on Cancer (IARC)** in Lyon, France has hosted many UICC fellows from around the world epidemiology projects exploring the risk factors related to cancer.

In 2016, **Mr Rafael Alonso** from the National Cancer Registry in Uruguay went to IARC to conduct a project on tobacco control, harnessing data obtained over 20 years from the Uruguay national cancer registry.

He said *“meetings with management and technical staff of the IARC allowed me to get to know the different tools used to evaluate these models as well as how to present them in scientific publications”*.



## Developing vaccines for cancer prevention

Every year, infection with Kaposi sarcoma-associated herpes virus (KSHV) accounts for 44,000 new cancer cases globally.

Kaposi sarcoma is the most common cancer in HIV positive individuals in sub-Saharan Africa. Despite the morbidity and mortality associated with it, there has been little research to develop a preventive vaccine.

**Dr Anne Barasa** from the University of Nairobi was awarded a one-year fellowship to study a vaccine for the prevention of virus-related cancers at the University of Massachusetts Medical School.

She said *“Thanks to my UICC fellowship I was able to demonstrate that a virus-like particle-based vaccine could induce an immune response in laboratory mice. Use of these findings has the potential to prevent KSHV infection and its associated malignancies”*.

In February 2017 she published her results in the journal **Oncotarget** ([click here to read publication](#)).

Dr. Barasa now has funding from the St. Baldrick’s Foundation develop an innovative new vaccine capable of both prevention and treatment of Kaposi sarcoma.



We are proud of the long term impact made in cancer prevention and early detection and diagnosis by UICC fellows returning home from their international fellowships. If you are interested in a fellowship in this field, please contact us on [fellows@uicc.org](mailto:fellows@uicc.org) or visit the [UICC fellowships webpage](#) for more information.