UWE professor shows how many bugs make light work

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A professor from the University of the West of England will present her inaugural lecture on bioluminesence and give insight into how this natural phenomenon has been used to make biomarkers that are making exciting breakthroughs in several areas of health research.

By reflecting on a serendipitous journey, from years of undergraduate teaching to current biomedical research at UWE, Professor Vyv Salisbury hopes to illustrate the pleasures and pitfalls of working with glowing bacteria and to emphasise their enormous future potential.

Professor Vyv Salisbury said, “It's great for the team that we have received this acknowledgement for the research. The professorship gives the work that we are doing in the field of bioluminescent biosensors a credibility that is critical to the external view of the research. I see this

title very much as recognition for the whole team of people I work with and we are all delighted."

Professor Salisbury will give a lecture on the topic - 'Many bugs make light work: A personal journey with bioluminescent bacteria'. She explains, "The lecture will look at how and why some living organisms make their own light and thus glow in the dark. It will go on to explain how this phenomenon of bioluminescence has been used to produce exquisitely sensitive and versatile microbial biosensors.

"The various and fascinating uses of the bioluminescent bacterial biosensors that have been constructed at UWE include, testing new antimicrobial treatments, checking salmonella survival on food, vectoring of pathogens by nematode worms and our latest work, devising a biosensor to show the effectiveness of cancer chemotherapy drugs."

Vyv Salisbury is a microbiologist who is involved in applied research with bioluminescent bacterial biosensors. She did her first degree in Microbiology at Bristol University, followed by a PhD in Bacterial Genetics at the Royal Post Graduate Medical School, London University. After a stint of part-time teaching at Luton Tech and the Open University, she returned to Bristol when her husband got a job at the BBC Natural History Unit and for many years she worked as a part-time lecturer at Bristol Polytechnic. After her appointment as a full time senior lecturer in 1988, she concentrated on teaching until a chance encounter in 1997 led to the start of the Bioluminescence Applications Research Group. Since then, the group have undertaken a wide range of research projects with research council, industrial, EU and UK Government funding.

In 2003 Vyv obtained Wellcome Trust Engaging Science funding to put on an exhibition in the @Bristol Science Centre entitled "Lighting up biomedical research" with bioluminescent bacteria and flashlight fish. In

2008 she got involved with a UN backed project to evaluate medical uses of Himalayan oregano oil which gave her an opportunity to camp up at 3000m in the Himalayas whilst visiting the herb picking cooperative in the Himachal Pradesh.

More information: Thursday 16 December 18:00 Room 2D07 Frenchay Campus, University of the West of England, UK.

Provided by University of the West of England