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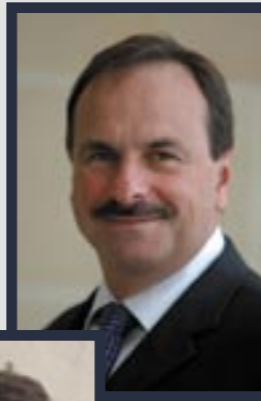
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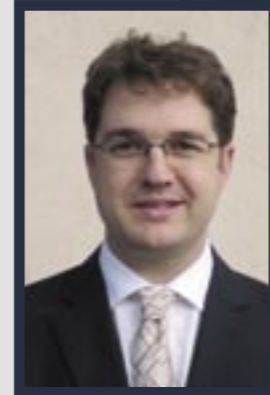
As WAIMR continues to go from strength to strength, and cement its place within the WA community, we would like to extend our sincere thanks to an unsung hero in our success.

Michael Smith



The Marketing Centre, based in Subiaco, has provided critical assistance to over a number of years.

Their advice in strategic marketing has been first-class – without the help of Mike, Scott and now Paul, we may not be where we are today. To the team at The Marketing Centre, a huge thank you from all of us at WAIMR.



Paul Murray

GENEROUS BEQUEST

WAIMR would also like to extend a sincere thanks to the late Ellen Doris Wood, for a very generous bequest.

A western suburbs resident, Mrs Wood's donation is a welcome boost to our research funding.

"This heartfelt gift provides a wonderful opportunity for us to pursue vital medical research that may not have otherwise been possible," WAIMR Director Professor Peter Klinken said.

WAIMR was one of three charitable organisations nominated by Mrs Wood as beneficiaries of her estate – WAIMR is honoured to have been chosen by Mrs Wood.

MONASH PROFESSOR VISITS

Monash University Professor David Jans recently presented details of his exciting research work to local scientists as part of WAIMR's weekly seminar series.

Professor Jans and colleagues are studying nuclear transport – how molecules move into and out of the nucleus of cells – in the hope it may provide insights into how to stop harmful viruses such as those that cause AIDS or respiratory disease.

"DNA is located inside the nucleus of cells, so that molecules such as proteins need to enter the nucleus if they are to affect gene activity," said Professor Jans.

"Many viral proteins appear to be adapted to be able to exploit cellular transport mechanisms in order to enter the nucleus and have a negative effect on gene activity, so that the more we can understand about the process of nuclear transport, the more opportunities there may be to come up with new targets for therapies to stop viruses in their tracks."



RECENT RESEARCH SUCCESS NATIONAL FELLOWSHIP

Western Australian Institute for Medical Research (WAIMR) PhD student and Royal Perth Hospital consultant medical oncologist Andy Redfern has secured a four-year Postdoctoral Training Fellowship from the National Breast Cancer Foundation worth more than \$120,000.

The funding will aid Dr Redfern, who is based in WAIMR's Laboratory for Cancer Medicine working with Professor Peter Leedman, in his bid to understand more about hormone activity in breast cancer.

"Two thirds of breast cancers require estrogen to stay alive. However, anti-cancer drugs such as Tamoxifen and even the newer aromatase inhibitors all work by blocking the estrogen signaling pathway, effectively killing them," he said.

"Some cells become resistant to these treatments. We have discovered some proteins which may be responsible for resistance to hormone treatments.

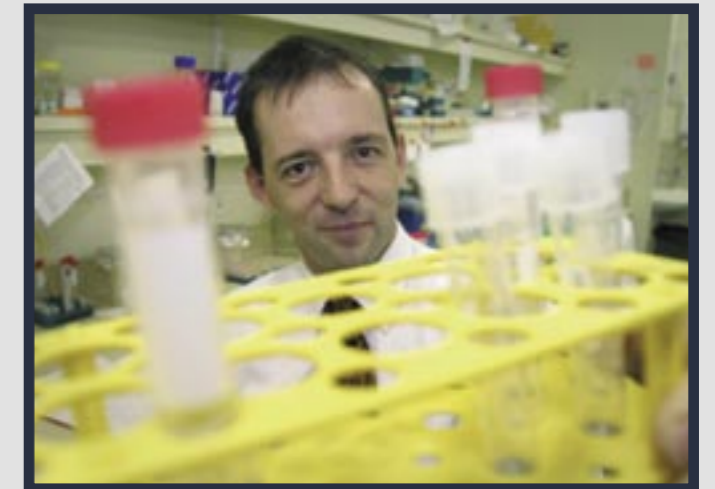
"Essentially, we want to know if these new proteins we have found tell us the chances a breast cancer will return and, more importantly, whether their presence predicts for the success or failure of a given hormonal treatment. This knowledge may allow us to select different treatments for different patients, minimizing side-effects and maximizing their chances of beating the disease.

"If these proteins do prove important in breast cancer treatment, our eventual goal would be to target these resistance proteins to create new therapies."

As part of this work Dr Redfern's research will study hormonal and chemotherapy resistance in several thousand cancer patients who participated in the BIG-2 trial, one of the largest international chemotherapy trials ever carried out – a trial which included Perth women.

NEW DIABETES FUNDING

Meanwhile Professor Leedman's team has been awarded \$40,000 through the Diabetes Australia Research Trust to investigate the potential of the gene SLIRP to help tackle the diabetes epidemic.



National Breast Cancer Fellowship recipient Dr Redfern

The funding will help researchers look for clues into how SLIRP might regulate the metabolic pathways that are affected in diabetes and obesity.

"We know SLIRP may be able to turn down the hormones that feed some breast and prostate cancers, but it is its ability to 'turn down' some of the genes involved in energy metabolism that is of interest to us in terms of battling diabetes and obesity," said Professor Leedman.

LUPUS GRANT WIN

The US National Institutes of Health has given WAIMR and The University of Western Australia (UWA) researcher Dr Daniela Ulgiati and her US colleagues \$2 million to expand their search for the genetic causes of lupus.

The group discovered a new piece of evidence suggesting a genetic linkage in the chronic autoimmune disease and have had their findings published in the American journal, Proceedings of the National Academy of Sciences.

Dr Ulgiati said the research was aimed at understanding what prompts the body's immune system to attack healthy tissue, which is the root cause of lupus. The grant runs until 2011 and will involve studying samples from around the world, including those from WA men and women affected by the potentially fatal disease.

KEY FINDING IN RARE MUSCLE DISEASE

WAIMR researchers have discovered a number of children suffering from rare muscle diseases whose bodies have 'switched on' a gene that is usually turned off at birth.

The finding by Professor Nigel Laing and Dr Kristen Nowak of WAIMR's Laboratory for Molecular Genetics, was made in collaboration with European researchers and recently published in *Annals of Neurology*, a leading international neurology journal.

Professor Laing said his team had discovered a number of children across Europe who, despite a complete absence of the crucial muscle protein actin, were not totally paralysed at birth, and managed to have some muscle movements.

"This intriguing finding led us to look deeper and what we saw is that while these children do not have any skeletal actin in their muscle, they have another form of the protein, known as heart actin, in their muscles," said Professor Laing.

"It appears the more heart actin they have in their muscles, the more movement they have."

Professor Laing said the finding was providing much excitement.



Dr Nowak & Professor Laing

"Before we are born, we all have both skeletal and heart actin in our muscles, but around the time of birth, we switch off the heart actin – and right now, it's a mystery why this happens," he said.

"We have long believed that if we could find out how to switch the heart actin back on in the muscle we could use this to create new treatments for these devastating muscle diseases.

"What's remarkable is that these children's bodies have performed this 'switching on' process naturally, presumably to help counteract their condition, and if we can tap into the science of how they've managed to do that, we could perhaps use that information to help other affected children."

LORNE NATIONAL CANCER CONFERENCE

WAIMR Professors Peter Klinken and Peter Leedman recently took part in the prestigious Lorne Conferences – these annual conferences attract international leaders in cancer and genetic research.

WAIMR researcher Associate Professor Ruth Ganss spoke about her latest discoveries on the regulation of tumour growth.

WAIMR Director Professor Klinken said it was a fantastic opportunity for the Institute to contribute to research that has a global impact, and develop partnerships with national and international teams.

"At the Lorne Cancer Conference, we heard about some

UPCOMING EVENTS SCHIZOPHRENIA SEMINAR

Together with the Mental Illness Fellowship of WA (MIFWA), WAIMR will host a public seminar to showcase the State's latest research and programs on schizophrenia.

Speakers are planned to include MIFWA Executive Director Sandra Vidot and some of WA's top researchers in the field. The seminar is designed to provide an insight into the ongoing search for solutions into this devastating condition that affects almost one in 100 people during their lifetime.

The seminar will be held on May 2 at the University Club of WA.

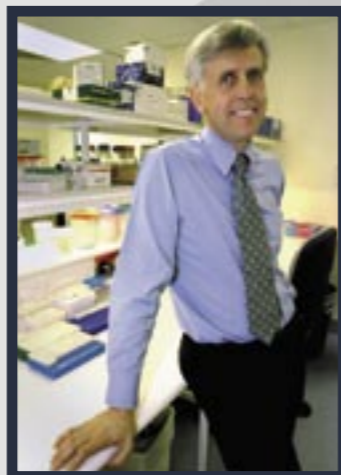
To register your interest for the seminar, please contact Lucy Conte on email lucycont@waimr.uwa.edu.au or call (08) 9224 0333.

remarkable discoveries being made around the world that could lead to improvements in the way we treat and prevent a range of cancers," he said.

"Conferences such as Lorne, are an important platform for medical researchers because they give us the chance to share our findings with our peers, hear about others discoveries and gather new pieces of the research puzzle."

Professor Leedman presented his findings on MicroRNA, a rapidly expanding area which is at the research cutting edge and extremely exciting. MicroRNAs can affect gene levels in the body, which are closely linked to certain cancers, so they could be used as targets for developing new treatments.

EPIGENETICS CONFERENCE



Professor Ravine

WAIMR is also taking a leading role in coordinating the Epigenetics 2007 Australian Scientific Conference being held in Perth during November.

Professor David Ravine will contribute to the national conference which will feature presentations from the world's leading experts.

To register your interest for the seminar, please contact EventEdge at info@eventedge.com.au or call 9389 1488.

NEW HEALTH AND AGEING CENTRE

A new centre dedicated to issues associated with ageing has been created in Western Australia.

Part of WAIMR, the WA Centre for Health and Ageing (WACHA) is made up of scientists investigating common conditions including dementia, falls, depression and immobility.

The Centre, led by Professor Leon Flicker, will focus on building on the collaboration between UWA's Schools of Medicine & Pharmacology and Psychiatry & Clinical Neurosciences to foster relationships with scientists of diverse disciplines.

The focus will be on cutting edge translational research into the common health problems of older people.

WAIMR Director, Professor Peter Klinken said he was delighted the Institute would be hosting this new Centre.

"As part of its role to facilitate collaborative research endeavours in WA, the Institute is well organized and structured to support groups like WACHA," he said.

"Promoting translational research – taking discoveries from the laboratory bench to the bedside, is a key platform in our strategic direction, so we are delighted to be assisting a team that fits perfectly into that area.

"As the Australian population ages, this area of research will become increasingly vital."



The WA Centre for Health and Ageing research team

VISITING CANCER EXPERT

WAIMR was honoured last year to have Raine Foundation Visiting Professor Dr Steve Morris present details of his research work as part of our weekly seminar series.

The US expert from St. Jude Children's Research Hospital in Memphis predicted new treatments that could dramatically improve the care of patients with a number of cancers, including an aggressive form of Non-Hodgkin's lymphoma, could be less than five years away.

Dr Morris said that drugs currently in development were targeting genetic mutations in a protein linked to anaplastic large-cell lymphoma and a soft tissue cancer.

The protein, called ALK, was discovered by Dr Morris and his team in the early 1990s who revealed elevated levels led to tumour formation.

The protein is also believed to play a part in causing a form of brain cancer and cancer of the food tube among others.

Dr Morris said recent studies stemming from his laboratory are focusing on the creation of cancer drugs that target the abnormally high ALK activity.

"Known as ALK inhibitors, these drugs are still in the early stages of development, and have not yet been used in patient trials, but

we are quietly confident – everything is pointing towards them being a better, more targeted treatment for patients," he said.

WAIMR is extremely grateful to the Raine Foundation for their support to bring Dr Morris to Perth.

Dr Morris presented several seminars and met with researchers, clinicians and pathologists during his stay.



Prof. Peter Klinken, Dr Jean-Philippe Lalonde, Dr Steve Morris