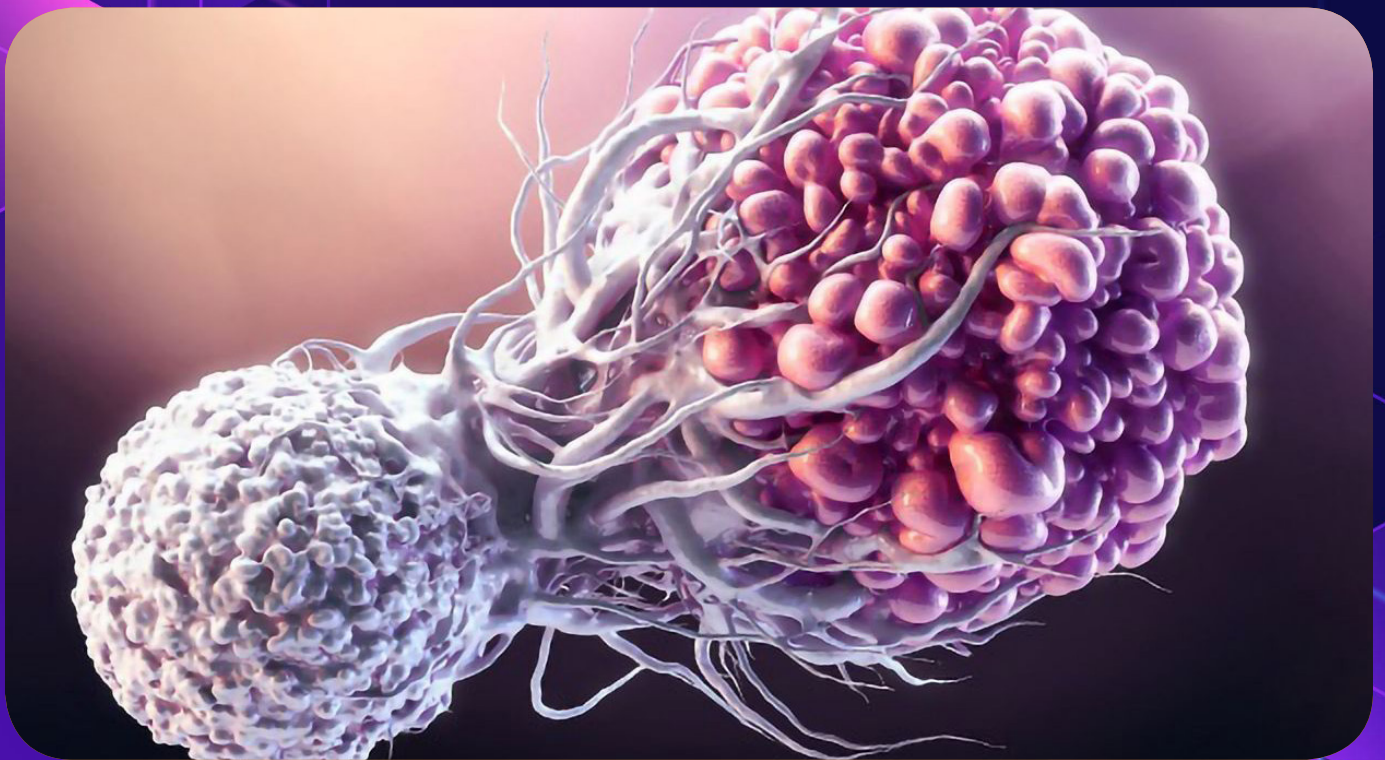


Scholars World Congress on
Cancer Research and Oncology

14-15 November 2022 | TIME Asma Hotel, Dubai, UAE



Hosted By:

Jeo Sheard | Program Manager

Cancer Science 2022

Scholars Conferences

21 Clifton Road, Newcastle Upon Tyne, England,

United Kingdom, NE4 6XH

cancerscience@scmeetings.org

+447426060443

<https://scholarsconferences.com/cancer-oncology>

ABOUT SCHOLARS CONFERENCES

Scholars Conferences is a global leader in producing high quality Conferences, Meetings, Workshops, Symposia and, Webinars in all major fields of Pharma, Healthcare, Science, Technology and Medicine.

Scholars Conferences is currently bringing International Conferences, Meetings, Workshops, Symposia and, Webinars with a main theme of "Accelerating the Cutting-Edge Scientific Research into Success by Bringing People Together". We have a stable and growing client base that ranges from small and medium-sized organizations worldwide. Our production and management teams are located in the US, UK, Japan and India access to deep pools of subject matter experts.

All the Conferences, Meetings, Workshops, Courses and Webinars conducted by Scholars International are accredited with Continuing Professional Development (CPD), Continuing Education (CE), and Continuing Medical Education (CME) Credits.

Scholars International Organizes International Conferences in Asia Pacific, Europe, Middle East, Canada and USA in the fields of Medical, Clinical, Life Sciences, Pharmaceutical Sciences, Healthcare and Engineering which covers all the subjects like Medical, Clinical, Nursing, Oncology, Neuroscience, Pediatrics, Microbiology, Chemistry, Environmental Sciences, Materials Sciences, Nanotechnology etc., We aim at bringing together world-renowned scientists, researchers, specialists, practitioners along with senior executives, industry experts, societies & associations members to share and exchange the advancements, approaches, and challenges in their expertise. Our conferences include Workshops, Symposiums, Special Sessions, Panel Discussions, B2B Meetings and Exhibitions.

We welcome all the interested members to participate at our conferences as Keynote Speakers, Plenary Speakers, Poster Presentations, Delegates, Sponsors and Exhibitors.

WHO WE ARE

We focus on bringing a much-needed level of efficiency and quality standards in the way we service our clients, thus building lasting partnerships-based quality, innovation, and commitment to abide by our deeply rooted core values.

WHAT WE DO

- Professional Scientific Event Organizing
- Event Management and Planning Services
- Conference Management Services
- Marketing and Promotion of Conferences
- Website Development and Management
- Sponsorship and Exhibit Sales
- Publication Services



OUR VISION

We are a truly professional group of individuals, striving hard to maintain and improve the quality of execution of our services. Our people constituting our team are our key assets.

Our fleet consists of young, dynamic, and quality conscious scientific professionals. A Promising Future In Store For You. Our motive is to create a chain of distinguished scholars, young researchers and industry experts to collaborate and harness the benefit of the scholars networking through our strong chain of academicians and market experts, we always strive to bring advancements to our scientific events.



OUR MISSION

As a Medical and Scientific Conference Organizer, Scholars Conferences oversees every detail of the conference program, from conference title selection, gathering speakers, participants and venue finalization to post-activity assessment and attendance certificates. We believe that a successful conference program requires focus, creativity, clear communication, and attention to detail. Our medical and scientific conferences are designed to meet the various needs of medical practitioners and clinicians, scientific researchers and developers, and industry partners.

Scientific Program

Day 1 | November 14, 2022 | Shaikha 2

JOIN ZOOM MEETING

[https://us06web.zoom.us/meeting/register/tZYqcu6trj0iGNHA7iGTQcFSjoHCSovK59_W](https://us06web.zoom.us/join/https://us06web.zoom.us/meeting/register/tZYqcu6trj0iGNHA7iGTQcFSjoHCSovK59_W)

MEETING ID: 827 5750 6825

PASSCODE: 891234

08:30-09:15 Registrations

09:15-09:30 Opening Ceremony

Keynote Forum

- 09:30-10:05 Title: Kinetics of DNA damage repair response associated with initial virus DNA integration into hepatocyte genome in model hepatitis B virus (HBV) infection
Thomas Michalak, Memorial University, Canada
- 10:05-10:40 Title: Fermentative Glycolysis controls cancers, pathogens growth and immunity - Genetic deconstruction
Jacques Pouyssegur, University Cote d'AZUR-CNRS-Inserm (IRCAN) and Centre A. Lacassagne, France
- 10:40-11:15 Title: Cancer epigenomics and epitranscriptomics: From knowledge to applications
Manel Esteller, Josep Carreras Leukaemia Research Institute, Spain

Group Photo

Networking and Refreshments Break: 11:15-11:35 @ Foyer

- 11:35-12:10 Title: « Simplified » technique of trans-abdominal cerclage(TAC) by laparoscopy: A 44 cases serie
Antoine Watrelot, Hospital Natecia, France

Speaker Session

- 12:10-12:35 Title: The Management of bone health in breast cancer patients on aromatase inhibitors
Sabahat Ahmed, St George's University of London, United Kingdom
- 12:35-13:00 Title: Embracing lean and agile healthcare to mitigate threat rigidity and enhance patient care
Julie Morgan, ARGC International, United Kingdom

Lunch Break: 13:00-13:40 @ Zaytuna Restaurant

- 13:40-14:05 Title: Australian Medical System – Entry for Junior Doctors & Consultants
Bharat (Sandeep) Gavankar, The Northern Hospital, Australia
- 14:05-14:30 Title: The Values of colposcopy in patients with the Diagnosis of the HSIL
Maryam Kalatehjari, Esfahan University of Medical Science, Iran
- 14:30-14:55 Title: Craniorachischisis totalis: A case report and review of the literature
Hazal Kutlucan, Gaziantep Abdulkadir Yuksel State Hospital, Turkey
- 14:55-15:20 Title: Four-Patient case series and literature review for Progressive Transformation Of Germinal Centers (PTGC), single-center experience
Sray Aldeen Salman, Shiekh Khalifa Speciality Hospital, Oncology Center, UAE
- 15:20-15:45 Title: Utilization of a mixture cure rate model based on the generalized modified Weibull distribution for the analysis of leukemia patients
Mohamed Elamin Omer, University of Science and Technology, Sudan

Video Presentations

- 15:45-16:05 Title: A pyocolpos, pyometra and acute renal impairment in a young adolescent with an imperforate hymen, a rare case report
Yasmine El-Masry, Tanta University, Egypt
- 16:05-16:30 Title: Personalized and Precision Medicine (PPM) as The Unique Healthcare Model to Secure the National Health and Wellness: From Family Planning and Gestation Period through Human Biosafety
Sergey Suchkov, MGUPP, Russia

Networking and Refreshments Break: 16:30-16:50 @ Foyer

Poster Presentations

- SIP0101 Title: Re-Irradiation for Recurrent brain tumors: A Retrospective Study from a Tertiary Hospital in Saudi Arabia
Hafiz Asif Iqbal and Hane Muamenah, King Faisal Specialist Hospital and Research Centre, KSA
- SIP0102 Title: The Emerging Role of E3 Ubiquitin Ligase SMURF2 in the Regulation of Transcriptional Co-Repressor KAP1 in Untransformed and Cancer Cells and Tissues
Sandy Boutros-Suleiman, BAR ILAN University, Israel
- SIP0103 Title: The Outcome of Radical Hysterectomy in Patients with Cervical Cancer in RSUP Prof. Dr. R. D. Kandou from January 2019 – December 2021
Jennifer Uriah, University of Sam Ratulangi Manado, Indonesia
- SIP0104 Title: The association between dietary intake and hypertension in pregnancy at Prof DR. R. D. Kandou Manado
Victor Moniaga, University of Sam Ratulangi Manado, Indonesia
- SIP0105 Title: Prevalence And Relation Between Premature Rupture Of Membranes With COVID-19 Infection In PROF. DR. R.D KANDOU, Manado Indonesia From January-December 2021
Shintya Habibie, Sam Ratulangi University, Indonesia

Panel Discussions | Day 01 Ends

Keynote Forum

- 09:30-10:00 Title: Quantifying landscape and flux reveals global and physical mechanism of cancer
Jin Wang, Stony Brook University, USA
- 10:00-10:30 Title: Telomere profiles in relation to ageing diseases and cancer
Nedime Serakinci, Turkish Republic of Northern Cyprus Presidency, Turkey
- 10:30-11:00 Title: Breast Cancer Genetics, Screening and Prevention
Fawad Khan, Medical Subspecialties Institute, Cleveland Clinic Abu Dhabi, UAE

Networking and Refreshments Break: 11:00-11:10

- 11:10-11:40 Title: Update for CNS Astrocytomas: Medical and Surgical Management Considerations
Brandon Lucke-Wold, University of Florida, USA
- 11:40-12:10 Title: From experimental research to clinical trial in the treatment of complications of radiotherapy by stem cells
Alain Chapel, Institute of Radiological Protection and Nuclear Safety, France
- 12:10-12:40 Title: Discovery and Mechanism of Action of Highly Selective Anti-Cancer Stem Cell Agents
Umesh R Desai, Virginia Commonwealth University, USA
- 12:40-13:10 Title: Breast Cancer And The Perioperative Window
Michael Retsky, University College London, UK

Lunch Break: 13:10-13:30

- 13:30-13:50 Title: Growth inhibitory efficacy of natural products in cellular models for molecular subtypes of clinical breast cancer
Nitin T Telang, Palindrome Liaisons Consultants, USA
- 13:50-14:20 Title: MicroRNAs and its target in the treatment of Oral Squamous Cell Carcinoma (OSCC)
Durairaj Sekar, Saveetha University, India

Session Tracks

Session Chair: Nedime Serakinci, Turkish Republic of Northern Cyprus Presidency, Turkey

- 14:20-14:40 Title: Treatment Options and Factors Affecting Outcomes in Patients with Hepatocellular Carcinoma In Sohag Governorate
Hamdy Saad Mohamed, Sohag University, Egypt
- 14:40-15:00 Title: Genetic polymorphisms affecting Doxorubicin cytotoxicity
Tana Takacova, Asklepios Clinics, Germany
- 15:00-15:20 Title: Novel Therapeutic Targets Such As Phytoestrogenic Isoflavonoid In Cancer Disease
Cinel Koksak Karayildirim, Ege University, Turkey
- 15:20-15:40 Title: Wnt5A and TGFβ1 Converges through YAP1 Activity and Integrin Alpha v Up-Regulation Promoting Epithelial to Mesenchymal Transition in Ovarian Cancer Cells and Mesothelial Cell Activation
Ghamartaj Hossein, University of Tehran, Iran

Break: 15:40-15:50

- 15:50-16:10 Title: Dose deposited by secondary particles appearing with high photon energy in radiotherapy
Mustapha Assalmi, Mohammed First University, Morocco
- 16:10-16:30 Title: IncMirRNA as Liquid Biomarker for Diagnosis and Prognosis of Breast Cancer
Menha Swellam, National Research Centre, Egypt
- 16:30-16:50 Machine Learning and Massive Data for Profiling Liver Cancer Disease: Trends and Challenges
Lailil Muflikhah, Brawijaya University, Indonesia
- 16:50-17:10 Title: Increased Expression and Altered Cellular Localization of Fibroblast Growth Factor Receptor Like 1 (FGFRL1) Are Associated with Prostate Cancer Progression
Syeda Afshan, Turku University Hospital, Finland
- 17:10-17:30 Title: Pre-treatment serum profiling of immune checkpoint mediators as predictive biomarkers of response in Non-Small cell lung cancer patients treated with anti-PD-1/PD-L1
Afsheen Raza, National Center for Cancer Care and Research (NCCCR), Qatar
- 17:30-17:50 Title: Rosmarinic Acid Exhibits Anticancer Effects via MARK4 Inhibition
Anas Shamsi, Centre for Interdisciplinary Research in Basic Sciences, India
- 17:50-18:10 Title: Non-linear Error Function based Extended Kalman Filter with Improved Scaling Factor for Cancer Chemotherapy
Utkarsha L Mohite, MET's League of Colleges, India
- 18:10-18:25 Title: Investigating the effect of the PRH transcription factor on gene expression in bile duct cancer cells
Alhumam Alkhusheh, University of Nottingham, UK
- 18:25-18:40 Title: Taking down the metastatic mothership: Gene expression analysis of Cancer Stem Cells following treatment with Sonic Hedgehog inhibitors
Aadilah Omar, University of the Witwatersrand, South Africa

Panel Discussions & Closing Ceremony



Scholars World Congress on **Breast and Women's Cancer**

Breast-Women's Cancer 2023 | 4th Edition

21-22 Jun 2023 | Paris, France

THEME: "Novel solutions to the greatest challenges in Breast and Women's Cancer"

<https://breast-womens-cancer.scholarsconferences.com/>

WELCOME MESSAGE:

After three successful Oncology editions, we are back with the motto "Novel solutions to the greatest challenges in Breast and Women's Cancer." Scholars Conferences cordially invites you to attend the prestigious **Scholars Global Summit on Breast and Women's Cancer** (Breast-Women's Cancer 2023) on **June 21-22, 2023** in **Paris, France**.

Our Approach:

Scholars Global Summit on Breast and Women's Cancer balances clinical, translational, and basic research, include **Keynote speeches** and **Invited speeches** given by forum for interaction, communication, and education for a broad spectrum of researchers, health professionals, and those with a special interest in Cancer related to women's health i.e., from the most common Women's cancer - Breast, Colorectal, Cervical, Ovarian, Uterine, Vaginal, Vulvar to the rarest fallopian tube cancer.

Our Objectives:

- To provide a platform for education, interaction and innovation
- To facilitate the Women's cancer related community especially on Breast Cancer to meet and discuss issues and challenges
- To update the community on recent concepts and results
- To review new information in order to integrate it into daily practice of the Oncologists.
- To promote academic skills in young specialists

Session Highlights:

- Epidemiology
- Genomic, epigenomic, proteomic, Metabolomic and transcriptomic profiles and their role in tumor formation
- Metabolism
- Screening & Diagnosis
- Therapy & Treatments (Immunotherapy and Antibody-based therapeutics)
- Metastasis
- The Immunological aspects in cancer patient

For more information and enquiries
contact undersigned:

Jeo Sheard | Breast-Women's Cancer 2023

cancerscience@scmeetings.org

+447426060443

SCHOLARS CONFERENCES LIMITED

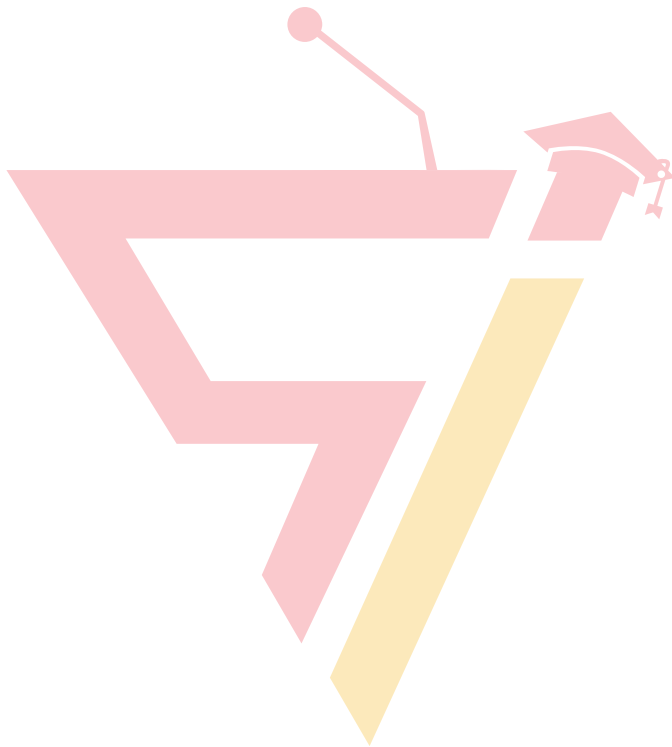
21 Clifton Road, Newcastle Upon Tyne, England | United Kingdom, NE4 6XH

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'KEYNOTE SPEAKERS Day 1'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**KEYNOTE
SPEAKERS
Day 1**





Thomas I Michalak
Memorial University, Canada

Biography

Thomas I. Michalak is an Honorary and University Research Professor at Faculty of Medicine, Memorial University, St. John's, NL Canada. He is former Senior (Tier 1) Canada Research Chair in Viral Hepatitis/Immunology and Professor of Molecular Virology and Medicine (Hepatology). He served as the coordinator of Graduate Programme in Immunology and Infectious Diseases at Memorial University. Professor Michalak is an internationally recognized expert in molecular and immunological mechanisms of viral persistence, virus-induced cellular injury and carcinogenesis, and in animal and in vitro models of hepatitis viral infections. He graduated medicine at the Warsaw Medical University and received PhD in immunopathology in 1976. He became the Senior Research Fellow at the Institute of Liver Studies, King's College of London, UK and the Visiting Investigator in Molecular and Experimental Medicine at the Scripps Research Institute, La Jolla, CA, USA. He is elected fellow of the Canadian Academy of Health Sciences and the American Association for the Study of Liver Diseases, recipient of the Queen Elizabeth II Diamond Jubilee Medal for contributions to the fight against liver diseases and received the Gold Medal from the Canadian Association for Study of the Liver and the Canadian Liver Foundation for achievements in re-

search and science in hepatology. He severed on several research granting agencies in Canada, USA and other countries, editorial boards, and as a reviewer of numerous scientific papers.

Kinetics of DNA damage repair response associated with initial virus DNA integration into hepatocyte genome in model hepatitis B virus (HBV) infection

Hepatitis B virus (HBV) is a highly oncogenic DNA virus which integration to human hepatocyte genome drives development of hepatocellular carcinoma (HCC). Mechanism of initial HBV DNA integration remained essentially unknown. Hepatocytes susceptible to HBV-closely related woodchuck hepatitis virus (WHV) were examined from 15 min to 72 h post-infection (p.i.). Virus-host genomic junctions were detected by inverse-PCR and clonal sequencing of amplicons. First WHV-host fusions occurred within 15 min p.i. All were of head-to-tail type implying formation by non-homologous end joining (NHEJ). Reactive oxygen species (ROS) and inducible nitric oxide (iNOS) were used to measure virus-induced oxidative stress, while comet assay cellular DNA damage. DNA repair-related and heme oxygenase-1 (HO1) genes were quantified by real-time PCR. Activities of NAD⁺ and poly(ADP-ribose) polymerase 1 (PARP1) cleavage were evaluated. The results showed that WHV upregulated ROS and transiently iNOS immediately after exposure to virus. Expression of PARP1 and XRCC1, the binding partner of PARP1, were induced in 30 min p.i. PARP1 expression culminated at 1 h and XRCC1 at 12 h p.i. together with 8-oxyguanine DNA glycosylase (OGG1). NAD⁺, a marker of PARP1 activation, and HO1, an indicator of cell pro-oxidative stress response, were significantly upregulated from 15 or 30 min p.i. Kinetics of PARP1 cleavage implied inactivation of PARP1 from 30 min p.i. onward. Conclusions: The study showed that initial WHV integration into hepatocellular genome was result of virus-induced oxidative DNA damage and suggested that repair of this damage by NHEJ PARP1-dependent pathway determined format of the first virus-host DNA fusions.



Jacques Pouyssegur

Centre A. Lacassagne, France

Biography

Jacques Pouyssegur is a CNRS Research Director Emeritus, graduated from an Engineering School in Biochemistry of the University of Lyon, where he obtained his PhD in 1972. He spent two years as a post-doctoral scientist at the National Cancer Institute of NIH (USA) and established his own research group in 1978 at the CNRS Biochemistry Centre of the University of Nice.

Jacques Pouyssegur has previous experience in bacterial and somatic cell genetics, metabolism, Na-H exchanger, pH regulation, G protein-coupled receptors and MAP kinase signalling in the context of growth control in mammalian cells. In the last 25 years his group developed a strong interest in hypoxia signalling, oxygen and nutrient sensing, angiogenesis, autophagy, amino-acid transporters, oxidative stress, cancer metabolism, Warburg effect and immune-suppression. He is member of AACR, EMBO, the French and European Academy of Sciences and the past President of the International Advisory board of the National Cancer Institute.

Fermentative Glycolysis controls cancers, pathogens growth and immunity - Genetic deconstruction

The evolution of life from extreme hypoxic environments to an oxygen-rich atmosphere has progressively selected for successful metabolic, enzymatic and bioenergetic networks through which a myriad of organisms survives. First we will discuss how fermentative glycolysis, an ancient evolved metabolic pathway, is exploited by rapidly growing tissues, tumours, immune cells, but also viruses and bacteria during infection. The 'Warburg effect' activated via Myc and HIF-1 in response to growth factors and hypoxia is an essential metabolic and energetic pathway which satisfies nutritional and energetic demands required for rapid genome replication. Second, we will present the key role of lactic acid, the end-product of fermentative glycolysis able to move across cell membranes in both directions via monocarboxylate transporting proteins (i.e., MCT1/4) contributing to cell-pH homeostasis but also to the complex immune response via acidosis of the tumour microenvironment. Importantly lactate is recycled in multiple organs as a major metabolic precursor of gluconeogenesis and energy source protecting cells and animals from harsh nutritional or oxygen restrictions. Third, we revisit the Warburg effect via CRISPR-Cas9 disruption of glucose-6-phosphate isomerase (GPI-KO) or lactate dehydrogenases (LDHA/B-DKO) in two aggressive tumors (melanoma B16-F10, human adenocarcinoma LS174T). Full suppression of lactic acid production reduces but does not suppress tumour growth due to reactivation of OXPHOS. In contrast, disruption of the lactic acid transporters MCT1/4 suppressed glycolysis, mTORC1, and tumour growth as a result of intracellular acidosis. Finally, we will briefly discuss the current clinical developments of an MCT1 specific drug AZ3965, and the recent progress for a specific in vivo MCT4 inhibitor, two drugs of very high potential for future cancer clinical applications.



Manel Esteller

Josep Carreras Leukaemia Research Institute, Spain

Biography

Manel Esteller is an M.D., Ph.D from the Universitat de Barcelona. He was a researcher at Johns Hopkins where his work was decisive in establishing promoter hypermethylation of tumor suppressor genes. Dr. Esteller was the Leader of the CNIO Cancer Epigenetics Laboratory and the Director of the Cancer Epigenetics and Biology Program (PEBC) in Barcelona. He is the Director of the Josep Carreras Leukaemia Research Institute (IJC), Chairman of Genetics in the University of Barcelona and ICREA Research Professor. His research is devoted to the establishment of the cancer epigenome. He is a highly cited researcher and has received prestigious recognitions.

Cancer Epigenomics and Epitranscriptomics: From Knowledge to Applications

For the last twenty-five years an increasing amount of evidence has shown the relevance of epigenetics in cell biology and tissue physiology, being DNA meth-

ylation aberrations in cancer the flag-ship for the recognition of its disturbance in human diseases. From the candidate gene approaches, new powerful technologies such as comprehensive DNA methylation microarrays and whole genome bisulfite sequencing has recently emerged that have reinforced the notion of epigenetic disruption in the crossroad of many sickness. From the poster-boy cases of MGMT and GSTP1 hypermethylation in the prediction of alkylating drug response and prostate cancer detection, respectively, to the personalized treatment of leukemia with small molecules targeted to fusion proteins involving histone modifiers, the field has walked a long path. The current talk will focus in the epigenetic profiling, basically at the level of DNA methylation and histone modifications that is starting to provide clinical value in the diagnosis, prognosis and prediction of response to drug therapies. For cancer, we have already a wide view of the undergoing DNA methylation events that expand beyond classical promoter CpG islands of tumor suppressor genes and we have a growing list of mutated chromatin remodeler genes that contributes to the tumorigenesis process. It is time to apply this knowledge in practical clinical situations like the diagnosis of cancers of unknown primary, the screening of malignancies in high-risk populations or a biomarker selection of the patients that should receive treatment with anticancer drugs. Beyond our comfort zone, we should be aware that chemical modifications not only affect the DNA molecule, but also RNA. The epigenetics of RNA or the analysis of the epitranscriptome represents another relevant step to understand the complex relationship between genotypes and phenotypes in human tumors.



Antoine Watrelot

Hopital Natecia, France

Biography

Antoine Watrelot currently works at Hospital-Natecia(Lyon). He is honorary Consultant of St Bartholomew and Royal London Hospital (London-UK). He has extensively published in the field of Reproductive Surgery. His current practice involves Reproductive and Endoscopic surgery. He has described the technique of Fertiloscopy (1997). He is member of numerous international scientific societies, and he is past Chairman of the MSRM (Mediterranean Society for Reproductive Medicine)(2009-2011) and past President of ISFT-RS (International Society on fallopian Tube and Reproductive Surgery)(2010), he has been appointed coordinator of the SIG "Reproductive surgery" at ESHRE. And coordinator of the SIG "safety and medicolegal aspects" at ESGE. He is full member of the Academie Nationale de Chirurgie -France (2016). He has been awarded the title of Chevalier de la Légion d'Honneur by the French Republic President(2016). He is vice president of ENDAURA (ENDometriose Rhone Alpes Auvergne)network(2019).

« Simplified » technique of trans-abdominal cerclage(TAC) by laparoscopy: a 44 cases serie

Objective: It is usually admitted that Benson cerclage may be proposed in patients with repeated history of late miscarriages. The use of laparoscopy in a simplified technique associated with the good results of this approach allow us to propose this technique for prevention of late miscarriage to patients having had only one late miscarriage. This paper describes the simplified laparoscopic technique which doesn't require lateral dissection of the uterine isthmus leading to a very atraumatic and not hemorrhagic approach.

Method of procedure: We performed a laparoscopic approach using a percutaneous needle (Endoclose™) allowing to easily do TAC. A mesh was knotted anteriorly and the procedure was performed prior to pregnancy in 41 patients and during the first trimester of pregnancy in 3 patients. So in all 44 patients underwent a TAC after having had at least 2 late miscarriages. We had 1 failure at 18 weeks of pregnancy after a cerclage performed during a twin pregnancy. Fortunately we repeat the procedure 6 months after and the patient delivered a normal baby.

Out of 44 cases, 40 patients became pregnant and have delivery (by caesarian section)at no less than 36 weeks of gestation.

Conclusion: This series demonstrates that laparoscopic Benson cerclage is an effective way to prevent late miscarriage and may be proposed more widely than before. Indeed information is critical since a C section is then required, but it appears that patients having had the distressful history of late miscarriage are usually very keen to have a procedure which may prevent recurrence of such drama.

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'SPEAKERS Day 1'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**SPEAKERS
Day 1**





Sabahat Ahmed

St George's University of London, UK

Biography

Sabahat Ahmed completed her MBBS at St George's University of London, and is currently completing her foundation training at the Royal Surrey County Hospital. She has a special interest in Medical Education and Quality Improvement, and hopes to specialize in Oncology or Rheumatology.

The Management of Bone Health in Breast Cancer Patients on Aromatase Inhibitors

Aromatase inhibitors form a key part of adjuvant endocrine treatment for post-menopausal women with hormone receptor positive breast cancer. They are

known to reduce the risk of disease recurrence, distant metastases and contralateral breast cancers. However, they are also known to cause an accelerated reduction in bone mineral density and increase fracture risk over time. Current guidelines suggest to identify at-risk patients with a baseline DEXA scan within 3-6 months of commencing treatment, and to treat appropriately according to results. In this audit, 59 breast cancer patients started on aromatase inhibitors in our trust, Royal Surrey County Hospital, were selected, and compliance to these guidelines was assessed. Results showed 66.1% of patients had their baseline DEXA scan within 3-6 months of commencing treatment, 16.95% had a delayed baseline DEXA scan after 6 months commencing treatment, and 16.95% did not have a baseline DEXA scan at all. Of those who had their DEXA scan, over half were found to have osteoporosis, and there was a large variation in treatment following receipt of results. Given these findings, we suggested strategies to improve knowledge and awareness of the guidelines available amongst clinicians - to do this, we presented these findings at a local trust educational meeting. Re-audit has shown improvement in the percentage of patients who have had a DEXA scan completed within good time. Following this, we further suggest standardisation of the location a patient's DEXA scan is carried out, and standardisation of the team that requests it.



Julie Morgan

ARGC International, UK

Biography

Julie Morgan MSc, RGN, APM (PFQ), is a consultant nurse and experienced assisted reproduction technology (ART) practitioner from the United Kingdom (UK). She has extensive experience of the Clinical, Operational, Human Resources of fertility clinics and is on the scientific and certification committees of the European Fertility Society (EFS), which monitors and advises clinics around the world regarding best practice.

She currently consults in research & development in IVF/Infertility technology and has recently created 'The IVF Program', which is a unique 3 step fertility program for patients undergoing IVF, Egg Freezing and Frozen Embryo Transfer. The program provides bespoke care for patients in the Middle East, allowing access to the UK's highest success rates, without leaving their own country. She is also the founder of 'All about Infertility', an online social media company

that provides evidence-based information for patients at all stages of their fertility journey.

Embracing lean and agile healthcare to mitigate threat rigidity and enhance patient care

Since 2020, the world has been impacted by significant global crises beyond our ability to predict or control: most predominately, the ongoing COVID-19 pandemic. Research shows that agile companies outperformed others in their ability to survive and thrive throughout this challenging period, by using a framework and working mind-set that helps respond to changing requirements.

The Assisted Reproduction and Gynaecology Centre (ARGC) has been the UK's most successful fertility clinic since 1995. In 2020, it began expanding their unique 'IVF Program' into the UAE. ARGC's bespoke three step approach for IVF, Egg Freezing and Frozen

Embryo Transfer is complimented by a 'Doctors' Club' that provides free, specialised infertility-based education resources and support to UAE doctors.

When COVID-19 struck, ARGC had to quickly adapt: it adopted a Kanban approach. This lean management method was applied through mapping out the patient journey and visualizing daily work flow. Using agile principles, ARGC also developed a medication algorithm and electronic folliculogram, thus enabling doctors to monitor patients worldwide from London, UK. Online scheduling and telemedicine boosted efficiency and improved patient experience. Regular virtual meetings and the creation of a cross-functional team built shared understanding and purpose. Free webinars provided continuing professional education.



Bharat (Sandeep) Gavankar

The Northern Hospital, Australia

Biography

Bharat [Sandeep] LaxmanGavankar completed his Undergraduate and post graduate education from Grant Medical College, Mumbai, India. And, he prac-

ticed in India [Vsai] for more than 20 yearsMigrated to Australia in 2011 and got Fellowship in Obstetrics and Gynaecology from The Royal Australia and New Zealand College of Obstetricians and Gynaecologists. He is a working as a consultant at The Northern Hospital, Epping, and Melbourne, AUSTRALIA. He trained more than 20 consultants from India to get into the Australian system and now all of them are working as consultants in Australia.He is also an examiner for DRANZCOG and FRANZCOG for the last 6 years.

Australian Medical System – Entry for Junior Doctors & Consultants

Australia is a country full of opportunities. Every professional or student in any field wants to explore possibilities to learn and earn in Australia. We have tried to cover ways and means to prepare and finally to land in Australia as a DOCTOR and have respectful life in this GOD GIFTED country.



Maryam Kalatehjari

Isfahan University of Medical Sciences, Iran

Biography

Maryam Kalatehjari has studied Obstetrics & Gynecology at Isfahan University of Medical Science, Iran. She is a dedicated medicine and researcher who always tries to link the scientific research and the practice in her work. As a result of her dedication to the research she was published some papers in scientific journals during her six years of work experience in obstetrics and gynecology. She really enjoys contributing to the scientific advances in the field.

The Values of Colposcopy in Patients with the Diagnosis of the HSIL

Background & Objective: Cervical cancer is one of the most preventable malignancies that can also be diagnosed in the early stages through screening tests. Papanicolaou test (Pap smear) is the most conventional

means for screening, while studies represent acceptable and more accurate outcomes of colposcopy in contrast to Pap smear. The current study aims to assess the values of colposcopy for cervical cancer diagnosis.

Materials & Methods: This is a cross-sectional study conducted on 94 patients diagnosed with high-grade squamous intraepithelial lesion (HSIL). After that, colposcopy was performed for all patients, and findings were presented as normal, chronic cervicitis, the thin acetowhite lesion (AWL), dense/thick AWL, AVP, pilling, and cauliflower-like mass. The biopsies were taken and pathological studies, as the gold standard was interpreted as normal, cervicitis, atypical squamous cells of undetermined significance (ASCUS), cervical intraepithelial neoplasia 1, 2 or 3 (CIN1, 2 or 3), carcinoma-in-situ (CIS), adenocarcinoma and invasive squamous cell carcinoma (SCC).

Results: The pap-smear results were significantly associated with the biopsy reports ($P < 0.001$; kappa = 0.225). Besides, significant concordance was found between colposcopy and biopsy ($P < 0.001$; kappa = 0.247). The total sensitivity and specificity of colposcopy were based on the biopsy findings as the gold standard was 97% and 41%, respectively ($P < 0.001$).

Conclusion: Colposcopy was significantly sensitive and specific for diagnosing both non-malignant CIN1 and malignant cervical lesions, but not for CIN2, 3, and CIS lesions.



Hazal Kutlucan

Gaziantep Abdulkadir Yuksel State Hospital, Turkey

Biography

Hazal Kutlucan is born in 1991 in Ankara, Turkey. She graduated from my secondary and high school as valedictorian in Ankara and then from Uludag University Medicine Faculty, Bursa, Turkey as honor degree student (2015). Following medicine faculty, she started obstetrics and gynecology residency in Gazi University Medicine Faculty and finished in 2021. She has worked as obstetrics and gynecology specialist in Gaziantep, Turkey since 2021. During her medicine faculty and residency, she visited several clinics and worked as an intern, observer doctor and guest doctor in USA, Montenegro, Italy, Germany, Poland and Belgium. She has worked on public health projects as volunteer medicine student in villages without health opportunities and her interests are on general women health including minimally invasive endoscopic surgeries, ultrasound in gynecology and obstetrics, fetal medicine and contraception. She made several researches, national and international presentations on intrapartum contraception, minimally invasive endoscopic surgeries, fetal medicine and ultrasonographic procedures including three-dimensional modalities.

Craniorachischistotalis: A case report and review of the literature

Instructions: Neural tube defects are heterogenous group of abnormalities in central nervous system with multifactorial origin, mostly caused by a failure of the neural tube closure mechanism. It can vary only spina bifida to severe craniorachischistosis. Craniorachischistosis is a variant of rachischistosis which is a developmental neural tube birth defect. It is rare, lethal and refers to the presence of both anencephaly and spina bifida. The objective of the case report is to discuss a fetus with craniorachischistosis and to review the literature.

Clinical Case: A 25 year old woman with four first trimester abortus history came with estimated gestational age of 26 weeks and had been diagnosed as anencephaly in the second trimester ultrasound. Termination of pregnancy had recommended but due to patient's request, the pregnancy reached to 26th weeks. She came with fully dilated cervix and active contractions. In this pregnancy, she did not use any folic acid supplement. The female fetus was born alive with 2/2 Apgar scores, had an open neural tube defect until sacrum and anencephaly. Neck was shortened and retroflexed. Eyes were normally bulged which is a result of absence of the frontal portion of cranial vault. Liver was palpable and abdomen looked like a ridge. Craniorachischistosis was diagnosed as postnatally. Fetal heart beat was under 60 bpm and became exitus in 10 minutes.

Conclusions: The craniorachischistosis is a rare, severe defect of the neural tube and a pathology incompatible with life. Folic acid deficiency is important risk factor and supplements should be advised.



Sray Aldeen Salman Wahib

Sheikh Khalifa Specialty Hospital, UAE

Biography

Salman Wahib Sray Aldeen, At the age of 25, he graduated from Damascus University in Syria with an M.D. He also earned a master's degree in hematology/medical oncology there in 2013. He is currently a specialist in medical oncology and hematology at Sheikh Khalifa Specialty Hospital in the UAE. He has served as a Senior specialist hematology medical oncology center and has more than 10 publications published in reputable journals. He is a member of Emirates Oncology Society (EOS) Emirates Hematology society (EHSA), Syrian oncology society (SOA), the European Society of Medical Oncology (ESMO), European Hematology society (EHA) and the American Society of Clinical Oncology (ASCO).

Four-Patient Case Series And Literature Review For Progressive Transformation Of Germinal Centers (PTGC), Single-Center Experience

Introduction: Progressive transformation of germinal centers (PTGCs) is a benign lymph node illness that is only infrequently linked to Hodgkin's disease. The ma-

jority of patients are young adults with unexplained, asymptomatic, localized or widespread lymphadenopathy that is frequently persistent or reoccure over a long period of time, makes patient victim of misdiagnosis or mismanagement. This patients case series aims to focus on the (PTGCs) and lymphoma relationship, helping in illuminating the challenges faced by physicans and providing some suggestiones on how to improve our follow ups to patients with (PTGCs).

During the initial visit, three of four patients were diagnosed and undergoing regular follow-up in our center, while only one patient was diagnosed outside and received rituximab for an unknown reason. All of the patients are young adult's male, two patients have isolated neck lymph node involvement while the other two have a widespread pattern. Only one patient had symptomatic generalized body ache, fatigability, and night sweat.their Follow-ups were ongoing since 2017 by PET CT with neither interval changes nor progression.there was one case that was associated with malignancy who had relapsed Non-Hodgkin Lymphoma and underwent Bone Marrow Transplantation ,PET CT showed decreased intensity of the involved lymph nodes, and other patient who had widespread lymphadenopathy had massive spontaneous elimination

Conclusion: PTGC and lymphoma sharing the same manifestations appearance, and catachrestic features that leading to a confusion during the diagnosis and the management. In spite its considered as non pre-malignant condition,there is a small risk for developing Nodular lymphocyte-predominant Hodgkin lymphoma (NLPHL) or another lymphoma, therefore the best part in the management is early appropriate diagnosis and close long follow-up.



Mohamed Elamin Omer

Universiti Putra Malaysia, Malaysia

Biography

Mohamed Elamin Abdallah is a statistics lecturer at the Sudan University of Science and Technology. He has been in the education sector for twenty-two years now and a researcher for the last four years. He is currently a Ph.D. candidate at Universiti Putra Malaysia. He wrote and published a few articles about the application of cure models in the survival analysis of cancer patients

Utilization of a Mixture Cure Rate Model based on the Generalized Modified Weibull Distribution for the Analysis of Leukemia Patients

Objective: Cure rate models are survival models, commonly applied to model survival data with a cured fraction. In the existence of a cure rate, if the

distribution of survival times for susceptible patients is specified, researchers usually prefer cure models to parametric models. Different distributions can be assumed for the survival times, for instance, generalized modified Weibull (GMW), exponentiated Weibull (EW), and log-beta Weibull. The purpose of this study is to select the best distribution for uncured patients' survival times by comparing the mixture cure models based on the GMW distribution and its particular cases.

Materials and Methods: A data set of 91 patients with high-risk acutelymphoblastic leukemia (ALL) followed for five years from 1982 to 1987 was chosen for fitting the mixture cure model. We used the maximum likelihood estimation technique via R software 3.6.2 to obtain the estimates for parameters of the proposed model in the existence of cure rate, censored data, and covariates. For the best model choice, the Akaike information criterion (AIC) was implemented.

Results: After comparing different parametric models fitted to the data, including or excluding cure fraction, without covariates, the smallest AIC values were obtained by the EW and the GMW distributions, (953.31/969.35) and (955.84/975.99), respectively. Besides, assuming a mixture cure model based on GMW with covariates, an estimated ratio between cure fractions for allogeneic and autologous bone marrow transplant groups (and its 95% confidence intervals) were 1.42972 (95% CI: 1.18614-1.72955).

Conclusion: The results of this study reveal that the EW and the GMW distributions are the best choices for the survival times of Leukemia patients.



Yasmine El-Masry

Faculty of Medicine, Tanta University, Egypt

Biography

Yasmine El-Masry has completed the MD in obstetrics and gynecology at the age of 35 years old from Tanta University, Egypt. She is a lecturer in obstetrics and gynecology department, faculty of medicine, Tanta University. She has 4 international publications and others are ongoing to be published in the near future.

A pyocolpos, pyometra and acute renal impairment in a young adolescent with an imperforate hymen, a rare case report

Background: Imperforate hymen (IH) is considered the most common obstructive anomaly of the female reproductive tract. Infections, endometriosis, subfertility or obstructive urinary symptoms could complicate if went undetected. Treatment of uncomplicated IH is simple through hymenotomy (cruciate incision or excision of hymen). In case of patients desiring virginity hymen-preserving surgeries is an alternative choice, such as simple vertical incision and annular hymenotomy. Sepsis is not common to occur secondary to imperforate hymen, but this case highlights it as a possible and evitable cause of sepsis in pediatrics' and adolescence. Pyometra is rarely seen in children and clinical experience in managing this condition is limited. Severe sepsis or septic shock in children is associated with high mortality, especially in developing countries, and accounts for about 8% pediatric intensive care unit (PICU) with estimated mortalities of about 25%, more over about 17% of survivors may show moderate disabilities. This review reported a rare case scenario with uncommon sev-

er presentations seen in adolescent gynecology, and it is a serious case and fortunately the pediatricians, emergency room physicians and gynecologists are rarely facing such issue. We provided our valuable experiences in the approaches of diagnosis and treatment for imperforate hymen that complicated with pyocolpus & pyometra and extremely rare & sever sepsis caused by virulent Klebsiella strains in children which is extremely rare to infect them.

Case presentation: we described diagnosis and management of such rare complicated case in a 14-year-old adolescent girl with an undetected imperforate hymen that was complicated by pyocolpus, pyometra, sepsis and the first presented as acute urine retention, acute renal failure and septic shock in an adolescent girl. Condition was managed by urgent resuscitation then under general anesthesia, partial, central & cruciate hymenotomy was done and the patient was underwent peritoneal dialysis continued her treatment in ICU.

Conclusion and importance of the research: beside the easiness of detecting and managing Imperforate hymen, it represents an evitable cause to more serious side effects such as acute urine retention, sepsis and subfertility. Suspicion should be raised for IH in adolescent girls presented with acute abdomen, urinary manifestations, and urinary emergencies for example acute retention, renal colic & acute renal failure. There is much to be learnt about how Klebsiella disseminates from the primary infection site, either the lung or the gut, to other sites. One troubling aspect of *K. pneumoniae* infections is the emergence of strains causing disseminated pyogenic infections. Although these strains are not generally associated with UTIs, they are clearly genetically related bacteria and present the potential to transfer, either directly or indirectly, genetic information into urinary isolates. Challenges that face the future management of these infections include the development of non-antibiotic based therapies since the ability of *K. pneumoniae* to rapidly evolve to antibiotic-resistant strains is alarming. The increased quality of healthcare has resulted in a greater population of susceptible hosts for *K. pneumoniae* infection. The prevention of infection and management of patients with infections will provide enormous challenges in the future.



Sergey Suchkov
MGUPP, Russia

Biography

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Med University and was awarded with MD. In 1985, maintained his PhD as a PhD student of the I.M. Sechenov Moscow Medical Academy and Inst of Med Enzymology. In 2001, maintained his Doctor Degree at the Nat Inst of Immunology, Russia.

From 1989 through 1995, was being a Head of the Lab of Clin Immunology, Helmholtz Eye Research Inst in Moscow. From 1995 through 2004 - a Chair of the Dept for Clin Immunology, Moscow Clinical Research Institute (MONIKI). In 1993-1996, was a Secretary-in-Chief of the Edit Board, Biomedical Science, an int journal published jointly by the USSR Academy of Sciences and the Royal Society of Chemistry, UK.

Personalized and Precision Medicine (PPM) as The Unique Healthcare Model to Secure the National Health and Wellness: from Family Planning and Gestation Period through Human Biosafety

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized & precision medicine (PPM). To

achieve the implementation of PPM concept, it is necessary to create a fundamentally new strategy based upon the subclinical and predictive recognition of biopredictors of hidden abnormalities long before the disease clinically manifests itself.

Each decision-maker values the impact of their decision to use PPM on their own budget and well-being, which may not necessarily be optimal for society as a whole. It would be extremely useful to integrate data harvesting from different databanks for applications such as prediction and personalization of further treatment to thus provide more tailored measures for the patients resulting in improved patient outcomes, reduced adverse events, and more cost effective use of health care resources. A lack of medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PPM!

PPM as being the Grand Challenge to forecast, to predict and to prevent is rooted in a big and a new science generated by the achievements of systems biology and translational Medicine (TM). NIH, Bethesda, MD, USA whilst being a strategic center of International Medical Research and Practice has included PPMT into a List of The Greatest Priorities in XXI Century. Who is expected to be responsible for getting PPM Model armed? TM and its applications! to be focused on "bench to bedside and back" research!!!

Implementation of PPM requires a lot before the current model "physician-patient" could be gradually displaced by a new model "medical advisor-healthy person-at-risk". This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPM to elicit the content of the new branch.

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'POSTERS Day 1'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**POSTERS
Day 1**





Hafiz Asif Iqbal and Hane Mohammad Muamenah,
Faisal Specialist Hospital and Research Center, KSA

Biography

Hani Mohammad Muamenah, MBBS from Umm Alqura Medical School- Saudi Arabia, completed Residency Training in Radiation Oncology at McMaster University- Canada 2014. He is a Fellow of The Royal College of Physicians & Surgeons of Canada since 2014. He has done Fellowship Training on CNS, Lung Malignancies and Stereotactic Radiation therapy at McMaster University in 2016 and CNS Oncology at university of Toronto, 2017. He is currently working as Consultant Radiation Oncologist & Section Head for the Radiation Oncology Section at King Faisal Specialist Hospital & Research Center - Jeddah, Saudi Arabia.

Hafiz Asif Iqbal's Biography: Hafiz Asif Iqbal, MBBS (2009) from University of Karachi-Karachi Medical and Dental College- Pakistan. He completed his residency training in Radiation Oncology at Aga Khan Uni-

versity Hospital- Pakistan 2016. He is a Fellow of College of Physician and Surgeon Pakistan since 2016 and currently working as Radiation Oncologist at King Faisal Specialist Hospital & Research Center- Jeddah, Saudi Arabia

Re-Irradiation for Recurrent Brain Tumors: A Retrospective Study from a Tertiary Hospital in Saudi Arabia

Objective: To analyze the post-re-RT progression-free survival (PFS) and incidence of radio-necrosis (BRN) in patients with recurrent primary brain tumors and to explore the associated factors.

Method: A retrospective cohort study that included 15 pediatric and adult patients with primary brain tumors who were treated with re-RT between 2011 and 2020. The study endpoints included the post-re-RT PFS, which were analyzed using Kaplan-Meier survival analysis, and the incidence of radio-necrosis. Baseline demographic and clinical data, primary radiation therapy (RT1) parameters and outcomes, and re-RT parameters and outcomes, were analyzed as factors for the two outcomes.

Result: Of the 15 participants, 7 had glioblastoma and 5 had anaplastic ependymoma. The mean interval from first RT to re-RT was 24 months (range=2-60 months). The mean total cumulative dose after re-RT as per EQD2 (equivalent dose in 2 Gy) fractions was 101.97 Gy (max 135.6 Gy). The total mean (max) cumulative doses for organs at risk as per EQD2 after re-RT were 54.05 (92.93) Gy for brain stem, 41.19 (87.94) Gy for optic chiasma, and 28.79 (77.18) Gy and 28.6 (88.71) Gy for left and right optic nerves respectively. Disease progression occurred in 10/15 patients, and the median PFS was 4 months (95%CI=0-9.1). Although not statistically significant, PFS was likely to be prolonged in case of low-grade tumors, longer RT1-re-RT time. Radiation necrosis occurred in 2 patients.

Conclusion: The expected clinical benefits against the adverse effects should be contemplated for re-irradiation in primary brain tumors.



Sandy Boutros-Suleiman
Bar-Ilan University, Israel

Biography

Sandy Boutros-Suleiman has completed her BSc in medical lab sciences at the age of 24, then completed M.Sc degree at the age of 26 years from Bar-Ilan University Azrieli Faculty of Medicine (Israel). Today she is a Ph.D student in the lab of molecular and cellular biology of cancer in Bar-Ilan University Azrieli Faculty of Medicine.

The Emerging Role of E3 Ubiquitin Ligase SMURF2 in the Regulation of Transcriptional Co-Repressor KAP1 in Untransformed and Cancer Cells and Tissues

KAP1 is a transcriptional co-repressor which interacts with the KRAB domain present in many transcription factors. KAP1 acts as scaffold for protein complexes repressing transcription and plays fundamental role in normal and cancer cell biology, affecting cell prolifer-

ation, DNA damage response, genome integrity maintenance, invasion, as well as anti-viral and immune response. The cellular functions of KAP1 are mainly controlled by its post-translational modifications including phosphorylation and SUMOylation. Recent studies have demonstrated significantly altered KAP1 protein levels in many human cancers. Despite its significance, the molecular mechanisms operating in and regulating KAP1 stability and activity are obscure. In this study, we identified SMURF2 as an important regulator of KAP1. We show that SMURF2 directly interacts with KAP1 and ubiquitinates it in vitro and in the cellular environment.

Interestingly, examination of untransformed cells showed that SMURF2 mostly exerted a negative impact on KAP1 expression, a phenomenon that was also monitored in certain Smurf2-ablated mouse tissues.

However, in tumor cells SMURF2 stabilized KAP1. Further investigations showed that SMURF2 regulates KAP1 post-translationally, interfering with its proteasomal degradation. The IHC analysis of breast TMA showed the expression levels SMURF2 and KAP1 in tumors were considerably higher as compared to their normal matching counterparts. These findings, showing that in certain types of cancer cells, including breast cancer, KAP1 is stabilized by SMURF2, may imply that elevated expression of KAP1 emanates from the heightened expression of SMURF2. All together, these findings uncover SMURF2 as a novel regulator of KAP1, governing its protein expression, interactions, and functions.



Jennifer Uriah

University of Sam Ratulangi Manado, Indonesia

Biography

Jennifer is the eldest child in the family. She completed her Medical degree from University of North Sumatera in Indonesia. She is currently completing her residency in University of Sam Ratulangi Manado Indonesia. She is in her 5th semester. In her free time, Jennifer enjoys travelling and listening to the music.

The Outcome of Radical Hysterectomy in Patients with Cervical Cancer in RSUP Prof. Dr. R. D. Kandou from January 2019 – December 2021

Introduction: Cervical cancer is the second most common cancer in women and the third most common cause of mortality due to cancer in women worldwide. The main treatment of early cervical cancer is radical hysterectomy; however, recurrence rate is still considered high even after a definitive treatment. This study aimed to evaluate the outcome of radical hysterectomy in cervical cancer patients in RSUP Prof. Dr. R. D. Kandou Manado.

Method: This descriptive study analyzed data from medical records of all cervical cancer patients who underwent radical hysterectomy in RSUP Prof. Dr. R. D. Kandou Manado from January 2019 – December 2021.

Result: A total of 23 subjects were included. Most cases occurred in 2019 (52.5%). Most subjects were 40-49 years (52.2%), married at the age of >20 years (82.6%), had a parity status of 2-4 (69.6%), and had one husband (91.3%). Most subjects were diagnosed with stage IIA (52.2%), squamous cell carcinoma (65.2%), had a tumor size of >4 cm (69.6%), with lymph node involvement (60.9%), disease-free interval of >12 months (86.9%), and did not have a recurrence (73.9%).



Victor Moniaga

University of Sam Ratulangi Manado, Indonesia

Biography

Victor is the second of three children in the family. He completed his Medical Degree from University of Sam Ratulangi, Manado, in Indonesia. He is currently undergoing his Obstetrics and Gynecology residency in University of Sam Ratulangi Manado Indonesia. He is now in his 5th semester. In his freetime, Victor enjoys playing football.

The association between dietary intake and hypertension in pregnancy at Prof DR. R. D. Kandou Manado

Hypertension is one of the greatest causes of maternal and fetal mortality in Indonesia, and it shows an increasing trend between 2010 and 2013. The high inci-

dence of hypertension in pregnancy in Indonesia may be related by the dietary intake of the pregnant women. This cross-sectional study was conducted on 108 female diagnosed with Hypertension in Pregnancy at the Obstetrics and Gynecology Department of Prof. Dr. RD Kandou Manado. The population was the pregnant woman in third trimester of pregnancy. The outcomes were analyzed using linear regression methods. A researcher-made questionnaire was used to collect data about diet intake. The result of this study shows that there were 62 cases (57%) age between 20-35; 63 cases (58.3%) with BMI between 25-29.9 kg/m²; 71 cases (65.7%) were secondary/high school; 63 (58.3%) cases on Primigravida; 63 cases (58.3%) no never pregnant before; 53 cases (49%) have 1-3 times of ANC; 102 cases (94.4%) have no history of Hypertension; 75 cases (69.4%) were smoking. There were 70 cases (64.8%) mostly eat Carbohydrate than Fat (18 cases; 16.7%), and Protein was less common: 12 cases (11.1%) eat meat and 8 cases (7.4%) eat fruits and vegetables. Hypertension in pregnancy are common to those who mostly take carbohydrate than other macronutrient even the patient had no history of hypertension. We believe this is happen because of the lack intake of Calcium and Magnesium that are common in vegetables, fruits and protein. Therefore, further study is needed to be done.



Shintya Habibie

Sam Ratulangi University, Indonesia

Biography

Shintya Habibie completed her medical degree from Sam Ratulangi University, Manado, Indonesia and she is currently completing Obstetrics and Gynecology residency in Sam Ratulangi University, Manado, Indonesia. During COVID-19 Pandemic in Indonesia, she was participating in the management of COVID-19 especially Obstetrics & Gynecology patients in General Hospital Prof. Dr. R. D. Kandou, Manado. She was married and had beautiful twin daughters. She enjoys singing and diving in her free time.

Prevalence and Relation between Premature Rupture of Membranes with COVID-19 Infection in PROF. DR. R.D KANDOU, Manado Indonesia from January-December 2021

Introduction: PROM is a complication in 3% of preterm pregnancies and 8% of term pregnancies. PROM is associated with maternal and perinatal morbidity

and mortality. The rupture of the membrane is the result of various factors that ultimately lead to accelerated membrane weakening. Inflammatory mediators associated with SARS-CoV-2 infection have been associated with poor perinatal outcomes. SARS-CoV-2 infection in pregnancy will increase infection-related obstetric morbidity including preterm delivery and premature rupture of membranes. The purpose of this study was to determine the prevalence and relation between premature rupture of membranes with COVID-19 infection at Prof. RSUP. Dr. RD Kandou, Manado, Indonesia.

Method: This study is a descriptive study. Anamnesis was carried out on a number of 243 research samples consisting of pregnant patients who gave birth at Prof. RSUP. Dr. R.D Kandou in a period of one year, namely January 2021 to December 2021. An evaluation of the number of pregnancies with premature rupture of membranes and COVID-19 infection in the study sample was carried out. Data were collected and then analyzed using Microsoft Excel and SPSS 26.0 software.

Results: Based on the data obtained from 243 pregnant patients who gave birth, 193 patients were aged between 20-35 years, 98 patients were nulliparous, and 32 patients were PROM patients, with 157 patients undergoing caesarean section.

Conclusion: The prevalence of PROM in RSUP Prof. Dr. R.D Kandou in the period of January 2021 – December 2021 was 13.2%. Most of the subjects were housewives, high school education background, and nulliparas. The most common method of delivery is by caesarean section. And there is no relationship between PROM and COVID-19 infection..

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'KEYNOTE Day 2'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**KEYNOTE
Day 2**





Jin Wang

Stony Brook University, USA

Biography

Jin Wang is currently a professor of Chemistry and Physics at State University of New York at Stony Brook (2004-now). He got his Ph.D in University of Illinois at Urbana-Champaign (1991). He was a post doctoral research fellow at University of Illinois (1991-1996). He was a guest scientist at NIH (1996-1997). He was also a senior analyst and vice president at global strategic analytics unit at Citibank (1997-2004). He is a fellow of European Academy of Sciences (2021), a fellow of American Association of Advancements in Sciences (2012), a fellow of American Physical Society (2010). He specializes in nonequilibrium physics and biological physics. He has published over 370 peer reviewed papers. His papers were referenced over

12500 times. His H-index is 58.

Quantifying landscape and flux reveals global and physical mechanism of cancer

Cancer is the second leading cause of death globally, yet the physical understanding of cancer formation is still challenging. In this talk, I will review our recent efforts in developing a landscape and flux theory based on the underlying regulatory gene networks. The landscape can quantify the weight of each state and therefore its topography such as basin depth and width as well as the barrier height between the states can be used to explore the stability of each state. The flux is related to the thermodynamic cost and can be used to quantify the energy input or metabolic utilization. The larger flux can lead to instability of the current state such as normal and the formation of the new state such as cancer. We performed the global sensitivity analysis based on the global landscape topography and flux to find out the key genes and regulations for the cancer formation. This provides a new way of identifying the hot spots for cancer. We apply our framework to several types of cancer such as breast cancer and gastric cancer, as well as several key issues of cancer such as cancer stem cell, epigenetic effects on cancer, cancer metabolism and cancer immunity. The results show that landscape and flux can be used to reveal the underlying mechanisms of cancer formation in different perspectives than the current available ones.



Nedime Serakinci

Turkish Republic of Northern Cyprus Presidency,
Turkey

Biography

Nedime Serakinci's research is focussed on telomere-telomerase biology, cancer and stem cell biology in connection with aging. Her research expertise is in telomerase-immortalized mesenchymal stem cells and their use in gene therapy and development of tissue models for drug discovery. Prof. Serakinci's research program is focused on the molecular, cellular and developmental biology of the adult mesenchymal stem cell and aging diseases. The principle aim of the program is to develop strategic and technical approaches necessary to acquire an understanding of the mechanisms underlying stem cell self-renewal and differentiation processes. Ultimately the objective is to provide rational scientific foundations for the application of cell and gene-based therapies to the treatment of human disease and injury.

Telomere profiles in relation to ageing diseases and cancer

During aging, telomeres shorten due to cell turnover. Telomere length is mainly maintained by telomerase. This enzyme is present in the embryonic stem cells in high concentrations and declines with age. It is still unclear to what extent there is telomerase in adult stem cells, but considering these are the founder cells to the cells of the all tissues in a body, understanding the telomere dynamics and expression of telomerase in adult stem cells is very important.

Telomere length has been implicated as one of the markers for aging related diseases and neoplastic transformation in both in vivo and in vitro studies. During carcinogenesis telomeres shorten due to high cell turnover and repeats are added by active telomerase or alternative lengthening of telomeres (ALT). This gradual shortening is replication driven and does not necessarily explain the presence of ultra-short telomeres. Ultra-short telomeres are observed when there is a sudden shortening in telomeres not related with cell division and may arise from breaks in telomeres due to oxidative damage and replication slippage. Telomere have important functions but do shorten through-out life, ultimately causing cellular problems. Telomere profiling may be use as an important clinical parameter. Telomere science showed that single or a small group of ultra-short telomeres are more influential in senescence associated disease progression rather than shortening that reflected as average telomere length, therefore it is important to identify the presence and load of ultra-short telomeres in diseases.



Fawad Khan

Medical Subspecialties Institute, Cleveland Clinic Abu Dhabi, UAE

Biography

Dr Fawad Khan is the Department Chair of Family Medicine, Interim Chair of Primary Care department and a Breast Specialist in the Oncology institute at Cleveland Clinic Abu Dhabi.

Dr Khan completed his Medical Breast Fellowship from Cleveland Clinic Ohio in 2021 and has developed our Medical Breast service which includes unique Hereditary High-Risk clinic, helping patients with identified genetic mutations as well as untested family members and individuals with a strong family history of breast cancers. His clinic also offers breast cancer

risk assessment and prevention, breast diagnostics, benign breast disease management and survivorship care for breast cancer. Prior to joining Cleveland Clinic Abu Dhabi, Dr Khan served as a Medical Director for ambulatory clinics at Mediclinic Alnoor Group. He continued his clinical practice as a physician while establishing family medicine program and a strong clinical governance system across the network of clinics. He was instrumental in developing best practice guidelines, policies, physician appraisal process and CME program to provide high standard of care. His previous roles included Lead Clinician at Malling Health Group in England where he was involved in various clinical quality improvement initiatives and served as represented the organization at Dartford and Gravesham Commissioning Group. Dr Khan went through Family Medicine Training Program at Grampian University Hospitals, UK after earning a medical degree from Allama Iqbal Medical College in Lahore, Pakistan. He is actively involved in clinical research, resident training program and a passionate speaker at international conferences.

Breast Cancer Genetics, Screening and Prevention

Breast cancer global burden is increasing and remains the most frequently diagnosed cancer in women worldwide. It is even more relevant in the UAE where studies show it presents a decade earlier compared to the western population.



Brandon Lucke-Wold
University of Florida, USA

Biography

Brandon Lucke-Wold was born and raised in Colorado Springs, CO. He graduated magna cum laude with a BS in Neuroscience and distinction in honors from Baylor University. He completed his MD/PhD, Master's in Clinical and Translational Research, and the Global Health Track at West Virginia University School of Medicine. His research focus was on traumatic brain injury, neurosurgical simulation, and stroke. At West Virginia University, he also served as a health coach for the Diabetes Prevention and Management program in Morgantown and Charleston, WV, which significantly improved health outcomes for participants. In addition to his research and public health projects, he is a co-founder of the biotechnology company Wright-Wold Scientific, the pharmaceutical company CTE cure, and was a science advocate on Capitol Hill through the Washington Fellow's program.

He has also served as president of the WVU chapters for the American Association of Pharmaceutical Scientists, Neurosurgery Interest group, and Erlenmeyer Initiative Entrepreneur group. In addition, he has served as vice president for the graduate student neuroscience interest group, Nu Rho Psi Honor Society, and medical students for global health. He was an active member of the Gold Humanism Honor Society and Alpha Omega Alpha Honor Society. He is currently a member of the Young Neurosurgeons' Committee.

Update for CNS Astrocytomas: Medical and Surgical Management Considerations

Astrocytomas include a wide range of tumors with unique mutations and varying grades of malignancy. These tumors all originate from the astrocyte, a star-shaped glial cell that plays a major role in supporting functions of the central nervous system (CNS), including blood-brain barrier (BBB) development and maintenance, water and ion regulation, influencing neuronal synaptogenesis, and stimulating the immunological response. In terms of epidemiology, glioblastoma multiforme (GBM), the most common and malignant astrocytoma, generally occur with higher rates in Australia, Western Europe, and Canada, with lowest rates in Southeast Asia. Additionally, significantly higher rates GBM are observed in males and non-Hispanic whites. Some research has suggested that higher levels of testosterone observed in biological males may account for the increased rates of GBM. Hereditary syndromes such as Cowden, Lynch, Turcot, Li-Fraumeni, Neurofibromatosis type 1 have been linked to increased rates of astrocytoma development. While there are a number of specific gene mutations that may influence malignancy or be targeted in astrocytoma treatment, O6-methylguanine-DNA methyltransferase (MGMT) gene function is an important predictor of astrocytoma response to chemotherapeutic agent temozolomide (TMZ). TMZ for primary and bevacizumab in the setting of recurrent tumor formation are two of the main chemotherapeutic agents currently approved in the treatment of astrocytomas. While stereotactic radiosurgery (SRS) has debatable implications for increased survival in comparison to whole-brain radiotherapy (WBRT), SRS demonstrates increased precision with reduced radiation toxicity. When considering surgical resection of an astrocytoma, the extent of resection (EoR) is taken into consideration. Subtotal resection (STR) spares the margins of the T1 enhanced MRI region, gross total resection (GTR) includes the margins, and supra-maximal resection (SMR) extends beyond the margin of the T1 and into the T2 region. Surgical resection, radiation, and chemotherapy are integral components of astrocytoma treatment.



Alain Chapel

Institute of Radiological Protection and Nuclear Safety, France

Biography

Alain Chapel, has been developing gene and cell therapy using non-human primates, immune-tolerant mice and rats to protect against the side effects of radiation for 25 years. He collaborates with clinicians to develop strategies for treatment of patients after radiotherapy overexposures. He has participated in the first establishment of proof of concept of the therapeutic efficacy of Mesenchymal stem cells (MSCs) for the treatment of hematopoietic deficit, radiodermatitis and over dosages of radiotherapy. He has contributed to the first reported correction of deficient hematopoiesis in patients (graft failure and aplastic anemia) thanks to intravenous injection of MSCs restoring the bone marrow microenvironment, mandatory to sustain hematopoiesis after total body irradiation. He is scientific investigator of Clinical phase II trial evaluating the efficacy of systemic MSC injections for the treatment of severe and chronic radiotherapy-induced abdomino-pelvic complications refractory to standard therapy (NCT02814864), Hirsch Index 29.

From Experimental Research To Clinical Trial In The Treatment Of Complications Of Radiotherapy By Stem Cells

During radiotherapy, the radiation beam can affect healthy tissues in the field of irradiation, even if it specifically targets the tumor, causing sequelae in 10% of patients that can occur up to 20 years after treatment. In the abdominal-pelvic area, this results in severe pain and extremely disabling functional disorders of the bladder and bowel. Current treatments are mainly symptomatic, and some patients do not respond.

For several years, Institut de Radioprotection et Sureté Nucléaire has been conducting research on cell therapy strategies using Mesenchymal Stromal Cells to repair radiation-damaged tissue. This experimental research, which is currently being carried out on different animal models, indicates that in the abdominal-pelvic area, Mesenchymal Stromal Cells stimulate the repair process after irradiation. They have thus made it possible to offer this treatment in a compassionate setting to human victims of the radiotherapy accident that occurred at the Jean Monnet Hospital in Epinal (Vosges, France). Four patients suffering from severe pelvic side effects due to excessive radiation dose after conformal radiotherapy for prostate adenocarcinoma received intravenous injections of allogeneic mesenchymal stromal cells.

For treated patients, mesenchymal Stromal Cell therapy was effective on pain, diarrhea, hemorrhage, inflammation, fibrosis and limited fistulization. No toxicity was observed. We are now starting inclusion in a clinical research protocol of phase 2, for patients with post-radiation abdominal and pelvic complications who have not seen their symptoms improve after conventional treatments (NCT 02814864, PRISME). Patients included in this trial will receive injections of allogeneic Mesenchymal Stromal Cell (from intra-family donors) and will be followed for 12 months at Hospital St-Antoine (Paris, France).

At the end of this period, if the efficacy of the treatment is proven, a phase III trial including a larger number of patients over a longer period will be used to confirm the therapeutic properties of this treatment.



Umesh R Desai

Virginia Commonwealth University, USA

Biography

Umesh Desai is the Alfred Burger Professor of Medicinal and Biological Chemistry at Virginia Commonwealth University (VCU), Richmond, VA. He also serves as the Chair of the Department of Medicinal Chemistry in the School of Pharmacy at VCU. He received his baccalaureate from the M. S. University of Baroda, and his doctorate from the Indian Institute of Technology, Bombay, India. Following postdoctoral and senior researcher experiences at University of Iowa, Massachusetts Institute of Technology, and University of Illinois, Chicago, he moved to VCU in 1998 where he has risen through the ranks to full professorship. He specializes in rational drug design with emphasis on glycosaminoglycan-based agents that function as anticoagulants and anticancer agents. He received an Established Investigator Award from the American Heart Association (2006) and Distinguished Scholarship Award from VCU (2013).

Discovery and Mechanism of Action of Highly Selective Anti-Cancer Stem Cell Agents

Glycosaminoglycans (GAGs), such as heparan sulfate (HS), have been implicated in tumorigenic responses including initiation, progression, metastasis, and angiogenesis. We have shown that a defined 6-mer of HS, but not 4-, 8-mer or longer, inhibits colorectal cancer stem cells (CSCs) by inducing activation of p38 MAPK. Our recent work demonstrates that a synthetic mimetic of the HS 6-mer, labeled as G2.2, selectively targets CSCs over bulk adherent tumor cells. We now report a hypothesis-driven analog design to discover three lipid-modified G2.2 analogs. Microarray-based screening against more than a dozen receptor tyrosine kinases led to identification of IGF-1R as a potential receptor of the synthetic GAG mimetics. Biophysical studies indicated that the preferred soluble and/or cell surface target receptors were in line with microarray results. Interestingly, G2.2 preferentially bound to IGF-1R in comparison to its soluble ligand IGF-1. G2.2 also preferred IGF-1R over an alternative receptor FGFR-1. The lipid-modified analogs bound to IGF-1R with better affinities as compared to parent mimetic G2.2, which support the cell-based anti-CSC inhibition results. Three different models of CSC growth in mouse were performed to test the efficacy of the lipid-modified analogs in vivo. Two of the lipid-modified analogs G2C and G5C were found to selectively inhibit CSCs in vivo and reduce tumor progression better than a combination of 5-fluorouracil and oxaliplatin (FUOX). Additionally, G2C and G5C displayed oral bioavailability and in vivo anti-cancer activity. Overall, this work presents a powerful proof of concept that synthetic GAG mimetics are unique anti-cancer therapeutics with high potential for selective elimination of the tumor initiating cells.



Michael Retsky

University College London, UK

Biography

Michael Retsky received a PhD in experimental physics from University of Chicago in 1974. His thesis project was to build a scanning transmission electron microscope that could resolve single atoms of silver, mercury and uranium and measure their elastic cross-sections (in Albert Crewe's laboratory). While doing electron optics research at Hewlett-Packard in 1982, a friend's wife was diagnosed with cancer. This friend organized an informal research group to study cancer and possibly help his wife. Retsky got more interested in cancer research than physics research and gradually made a career change over a period of 5 years. He read every paper he could find at Penrose Cancer Hospital. His first publication in oncology (Speer et al Cancer Research 1984) predicted that breast cancer growth included occasional periods of dormancy. This paper studied clinical data using computer simulation. Retsky later became Prof of Biology at University of Colorado, Visiting Prof at University of Texas (in Wm. McGuire's laboratory) and on Judah

Folkman's staff at Harvard Medical School. He is now Honorary Associate Professor at University College London. Links: <https://magazine.iit.edu/fall-2019/when-life-happens>

Breast cancer and the perioperative window

Much research in cancer is attempting to find ways of preventing patients from dying after metastatic relapse. Driven by data and analysis, this project is an approach to solve the problem upstream, i.e., to prevent relapse. This project started with the unexpected observation of bimodal relapse patterns in breast and a number of other cancers. This was not explainable with the current cancer paradigm that has guided cancer therapy and early detection for many years. After much analysis using computer simulation and input from a number of medical specialists, we eventually came to the conclusion that the surgery to remove the primary tumor produced systemic inflammation for a week after surgery. This systemic inflammation apparently caused exits of cancer cells and avascular micrometastases from dormant states and resulted in relapses in the first 3 years post-surgery. This is not a small effect. Animal studies agreed with these findings. It was determined in two retrospective studies that the common inexpensive perioperative NSAID ketorolac could curtail early relapse events after breast cancer surgery. Based on what we now know, surgeons and anesthesiologists should take extra precautions to reduce systemic inflammation during the perioperative window. This also applies to cosmetic or health related surgeries for persons who are cancer survivors. Refer to the second 2020 paper below. We are currently seeking funds to conduct a clinical trial in Nigeria.



Nitin T. TELANG

Palindrome Liaisons Consultants, USA

Biography

Nitin T. TELANG is the Director, Cancer Prevention Research Program at Palindrome Liaisons Consultants, New Jersey. He earned his Ph.D. degree in India (1974), and obtained post-doctoral training at University of Nebraska, American Health Foundation, New York and Memorial Sloan-Kettering Cancer Center, New York (1976-1985). He has served as faculty member at Memorial Sloan-Kettering Cancer Center, Weill-Cornell Medical College, and Strang Cancer Prevention Center, New York (1986-2007). Dr. TELANG has published peer-reviewed papers in the areas of carcinogenesis, cancer prevention, and cancer stem cell biology. He has served on Grant Review Study Sections for National Cancer Institute (NCI) and US Department of Defense (DOD). He is on the editorial boards for Oncology Reports, International Journal of Oncology and World Academy of Sciences Journal. His research has been funded by grants from NCI and DOD. He has received NCI FIRST Award, DOD IDEA Award and AN Marquis Lifetime Achievement Award.

Growth inhibitory efficacy of natural products in cellular models for molecular subtypes of clinical breast cancer

Background: Progression of early breast cancer to advanced stage metastatic disease represents a major cause of death in women. The mainstream therapeutic options are dependent on specific subtype and include conventional chemo-endocrine therapy and molecularly targeted therapy. Long-term therapeutic options are associated with spontaneous/acquired therapy resistance and emergence of chemo-resistant cancer initiating premalignant stem cell population that evolves in to metastatic phenotype. These limitations emphasize an unmet need to identify therapeutic alternatives against therapy resistance. Dietary natural products because of human consumption, lack of systemic toxicity and documented preclinical efficacy may represent testable therapeutic alternatives.

Experimental Evidence: Cellular models for molecular subtypes of clinical breast cancer exhibit hyper-proliferation and quantifiable risk for cancer development. Mechanistically distinct natural products exhibit anti-proliferative and pro-apoptotic effects and reduce cancer risk. The parental cell lines provide putative cancer stem cells. The development of stem cell models is quantified by drug-resistant progressive growth and upregulated expression of stem cell specific cellular and molecular markers. Effects of select natural products on stem cell models provide mechanistic leads for stem cell targeted inhibitory efficacy.

Conclusions: This presentation provides an overview of conceptual and technical aspects of model development and mechanistic leads for stem cell targeted efficacy of natural products. Collectively, the experimental evidence provides a scientifically robust rationale for future approaches on patient-derived clinical samples that reduces extrapolation of the data and enhance their clinical translatability



Durairaj Sekar

Saveetha University, India

Biography

Durairaj Sekar Ph.D received a doctoral degree in the field of biological sciences from the University of Camerino, Italy. He was awarded a doctoral fellowship from the Ministry of Italian Government and the University of Camerino, Italy (2008-2011). After that, he worked as a post-doctoral research scientist at the International Centre for Genetic Engineering and Biotechnology (ICGEB, UN), Cape Town, South Africa, from 2011-2013). He published notable scientific research and review articles in many peer reviewed high impact international journals, including the Nature group of journals. He published an article in the journal Molecular Cancer (IF: 27.4 corresponding author) in the area of Exosomal microRNAs in various types of cancer. He received two Extramural Research grants from the Indian Council of Medical Research

(ICMR) and one core grant from the Department of Science and Technology (DST). His research interests are Non-coding RNAs/microRNAs biology and their regulation in non-communicable diseases like hypertension, diabetes, and various types of cancer. Currently, he is serving as an editor for peer-reviewed journals and as a peer reviewer for nature group journals. There have been 71 articles published in SCI-indexed journals. H index- 22 and i10- 27. Impact total: more than 300. PhD scholar Guidance: 4. Guided: 1

MicroRNAs and its target in the treatment of Oral Squamous Cell Carcinoma (OSCC)

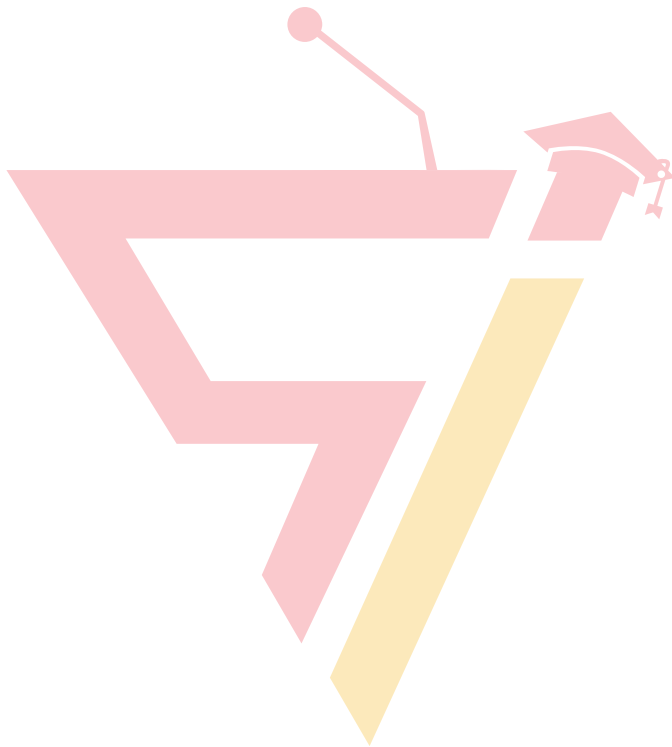
Oral Squamous Cell Carcinoma (OSCC) accounts 90% of head and neck cancer and it is one of the commonly diagnosed cancers in all kinds of populations. It has been known that OSCC progresses oropharynx and oral cavity. The main risk factors for OSCC are smoking and alcohol consumption in western world, smokeless tobacco and areca nut products are the main etiological factors for the development of OSCC. Extensive research has been carried out globally to find out the gene responsible for the development of OSCC, but none of the gene identified so far. It has been observed that discovery of reliable markers and therapeutic target may help clinical practice to manage or control the advanced stage OSCC. On the other side, microRNAs (miRNAs) proven to be an effective diagnostic and prognostic molecules for OSCC. It has been known that most of the miRNAs are involved in cellular homeostasis, proliferation, migration and invasion.

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'Scientific Sessions Day 2'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**Scientific
Sessions
Day 2**





Hamdy Saad Mohamed
Sohag University, Egypt

Biography

Hamdy Saad Mohammad is an Assistant lecturer of Internal Medicine, Sohag University, Egypt. He completed his M.B.B.Ch in medicine and surgery in 1996, Faculty of Medicine, South Valley University. He was the House officer in Sohag University Hospital from 1/03/1997 to 28/02/1998, Resident (Registrar) in Internal Medicine Department, Sohag University Hospital from 01/03/1998 to 28/02/2001, Demonstrator of Internal Medicine from 1/03/2001 to 8/04/2002 in Internal Medicine Department, Sohag University He has got Fellowship of Gastroenterology and Hepatology Department, Kagawa University, Japan from

1/7/2006 to 28/7/2008 with a special training on Hepato cellular carcinoma (HCC) diagnosis and treatment.

Treatment Options and Factors Affecting Outcomes in Patients with Hepatocellular Carcinoma InSohag Governorate

Background: Hepatocellular carcinoma is considered the most common primary liver tumour with increased morbidity and mortality worldwide. Therefore, we aimed to retrospectively analyze the clinical outcomes among patients with hepatocellular carcinoma treated with different treatment modalities and detect the possible factors that could affect these post-treatment outcomes.

Results: Among 407 patients,142 were cured at the first 3-months,73.2% maintained cured while 26.8% developed local recurrenceafter one year of therapy. 47.7% of the included patients deteriorated in the first 3-months post-treatment. The mortality rate was 41.8% during the first year postoperatively.

Conclusion: A fewer number of the hepatic focal lesion, small-sized lesion, early to intermediate stages of disease severity, and higher hemoglobin level were the only independent predictors of a favourable outcome. Further analysis of prospective randomized studies with a larger number of participants is strongly recommended.



Tana Takacova

Asklepios clinics, Germany

Biography

Tana Takacova has completed her medical degree at the Comenius University in Bratislava, Slovakia, as well as the Georg-August University in Goettingen and Heidelberg University School of Medicine in Germany. In addition, she frequented the lectures of Molecular Medicine as an honorary guest student at the Georg-August University in Goettingen, the online courses of Medical School Pathology and accomplished the Advanced Biosciences Program at UC Berkeley Extension, USA. Her research interests involve the topics of the tumour microenvironment, cancer immunotherapy, and personalized medicine. Currently, she is completing her residency in Medical Oncology at the Asklepios clinics, Altona, Germany, as well as pursuing her Master of Science studies in Advanced Oncology at the University of Ulm, Germany.

Genetic polymorphisms affecting Doxorubicin cytotoxicity

Although Doxorubicin (DOX) is the archetypical anthracycline cytostatic drug in the treatment of various cancer types, its use is limited by dose-dependent toxic side effects. Lymphoblastoid cell lines (LCLs) from unrelated donors were used as a surrogate for proliferating cells. All of the cell lines evaluated were of Caucasian origin. Cell viability, defined by EC50, served as the readout for sensitivity towards DOX and was assessed in relation to intracellular DOX accumulation and drug-related production of reactive oxygen species (ROS). These functional parameters

were assessed for the impact of single nucleotide polymorphisms in selected candidate genes. These comprised topoisomerases (TOP1, TOP2A, TOP2B, TOP3A, TOP3B), DNA repair-related genes (MLH1, MLH3, MSH2, MSH3, MSH6, PMS1, PMS2, TP53), genes encoding the constituents of the NADPH-oxidase complex (CYBA, CYBB, NCF1, NCF2, NCF4, RAC2), and genes encoding the antioxidant enzymes expressed in LCLs (CAT, SOD1). A strong negative correlation was observed between ROS formation upon DOX and EC50 values ($p = 1 \times 10^{-8}$), indicating ROS as a major route for cytotoxicity of DOX. Moreover, ROS formation correlated with intracellular DOX levels ($p=0.02$).

However, no direct relationship between intracellular DOX and EC50 could have been registered ($p = 0.2$). Only one SNP, rs113270903, located in the second last intron of the gene coding for topoisomerase 3A, was significantly associated with a higher sensitivity toward DOX ($p=0.0045$), characterized by a decrease of EC50 values by about 30%. The frequency of the variant allele amounts to 9.5% in the Caucasian population.

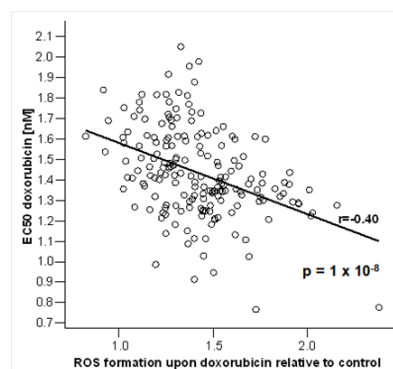


Figure 1. EC50 for doxorubicin independence on ROS formation

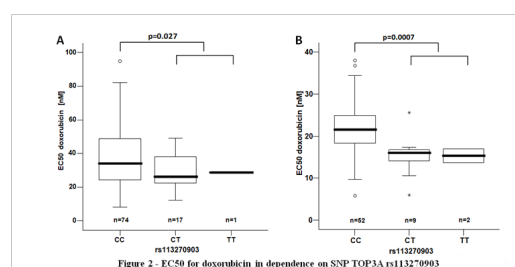


Figure 2 - EC50 for doxorubicin in dependence on SNP TOP3A rs113270903



Cinel Koksal Karayildirim

Ege University, Turkey

Biography

Cinel Koksal Karayildirim received his degree in biology at the Science Faculty, Ege University in Izmir, Turkey. Karayildirim obtained a PhD in biology with a focus on genotoxicology from Ege University in 2015. She conducted postdoctoral research on cancer chemopreventive natural products. She joined the microbiology department at E.U. as a prelector (University teacher) in 2018. Her research interest is focused on the molecular toxicology microbiology, biocides, and molecular cell biology. Moreover, her current interests include the bioactive natural products, in vivo animal models and biocides microbiology efficacy tests. She is on the editorial board of 6 journals also she has about 17 university projects and 14 professional publications.

Novel Therapeutic Targets Such as Phytoestrogenic Isoflavonoid in Cancer Disease

Objectives: As a natural estrogen-like compound, soy

isoflavone is widely used as a dietary supplement beneficial to human and animal health effects. Anti-angiogenic isoflavonoids are gaining attention as a novel approach in the prevention and treatment of tumor progression and metastasis. These phenylpropanoid compounds as bioactive phytoestrogens exhibit various pharmacological activities including antimicrobial, anti-inflammatory and antioxidant effects. The purpose of this study was to evaluate the anti-angiogenic and apoptotic effects of one of the most popular isoflavonoid in-vitro studies.

Methods: The cytotoxicity and nitric oxide synthase activities of isoflavonoid were determined in cell cultures. The expression of apoptosis-related genes was determined with RT-PCR. Cell cycle assays were performed using a flow cytometer and cellular apoptotic rate was measured. The anti-angiogenic potential of isoflavonoid was assessed with an in vitro HET-CAM model.

Results: The results suggested that isoflavonoid has cytotoxic effects at 21 $\mu\text{g}/\text{mL}$. Flow cytometry analysis showed that isoflavonoid induced apoptosis and arrested the cell cycle in the G₀/G₁ phase. Isoflavonoid exposure was associated with increases in CASP3 and TNF- α gene expression doses of 21 and 42 $\mu\text{g}/\text{mL}$, respectively. The strongest anti-angiogenic effect of isoflavonoid when compared to the control group was observed at 100 and 200 μM on the chorioallantoic membranes of hen eggs.

Conclusions: This is the first study that evaluated isoflavonoid for its in vitro antitumor activities, clarified its possible apoptotic molecular mechanism and provided novel insights into its anti-inflammatory nature and effects on the expression of related key genes.



Ghamartaj Hossein
University of Tehran, Iran

Biography

Ghamartaj Hossein studied Biology and earned her Ph.D. in the field of reproductive biology in 1997 working on heparin sulfate proteoglycans role in ovulation events at the Geneva University and performed a Postdoc in cancer biology in the Department of Morphology, C.M.U, Geneva, Switzerland. Then worked as a medical advisor in an international pharmaceutical company in the field of fertility. She works as an Associate Professor of Developmental Biology at the School of Biology, College of Science, University of Tehran, Iran since 2005. Dr. Hossein's research interests are deciphering the role cancer related-signalling pathways involved in ovarian cancer progression.

Wnt5A and TGFb1 Converges through YAP1 Activity and Integrin Alpha v Up-Regulation Promoting Epithelial to Mesenchymal Transition in Ovarian Cancer Cells and Mesothelial Cell Activation

We investigate whether Wnt5A is associated with the TGF-b1/Smad2/3 and Hippo-YAP1/TAZ-TEAD pathways, implicated in epithelial to mesenchymal transition (EMT) in epithelial ovarian cancer. We used 3D and 2D cultures of human epithelial ovarian cancer cell lines SKOV-3, OVCAR-3, CAOV-4, and different subtypes of human serous ovarian cancer compared to normal ovary specimens. Wnt5A showed a positive correlation with TAZ and TGFb1 in high and low-grade serous ovarian cancer specimens compared to borderline serous and normal ovaries. Silencing Wnt5A by siRNAs significantly decreased Smad2/3 activation and YAP1 expression and nuclear shuttling in ovarian cancer (OvCa) cells. Furthermore, Wnt5A was required for TGFb1-induced cell migration and invasion. In addition, inhibition of YAP1 transcriptional activity by Verteporfin (VP) altered OvCa cell migration and invasion through decreased Wnt5A expression and inhibition of Smad2/3 activation, which was reverted in the presence of exogenous Wnt5A. We found that the activation of TGF_1 and YAP1 nuclear shuttling was promoted by Wnt5A-induced integrin alpha v. Lastly, Wnt5A was implicated in activating human primary omental mesothelial cells and subsequent invasion of ovarian cancer cells. Together, we propose that Wnt5A could be a critical mediator of EMT-associated pathways.



Mustapha Assalmi

Mohammed First University, Morocco

Biography

Mustapha Assalmi is a PhD in applied radiation physics. His work has focused on the optimization of Monte Carlo codes used in particle physics simulation. His current project is the Monte Carlo simulation of the

medical linear accelerator. He has been working since 2019 as a temporary teacher at the Multidisciplinary Faculty of Nador, Mohammed First University, Morocco.

Dose deposited by secondary particles appearing with high photon energy in radiotherapy

In this work, we studied the effect of secondary particles or known as contamination particles which are produced by the interaction of high energy photons with obstacles. We have detected by Monte Carlo simulations the contamination particles appearing with the 18MV beam emitted by an Elekta medical accelerator. As well as the ability of these particles to deposit a significant dose in the total dose planned by the TPS planning system. Furthermore, this study shows the trajectories and kinetic energy of the contamination particles in a MIRD phantom positioned in the breast treatment situation modeled by the G4Linac_MT code.



Menha Swellam

National Research Centre, Egypt

Biography

Menha Swellam is a Professor of Biochemistry at Biochemistry department- Biotechnology Research Institute, National Research Centre, Egypt. I am a member of the editorial board and a peer reviewer of international journals, thesis and projects, member of the Egyptian permanent promotion council. I have published over 50 peer reviewed manuscripts in PubMed and Scopus cited journals, principal investigator of a number of national projects. I have been recognized in 2008 by Encouraging National Research Centre prize from National research Centre, and in 2009 by Encouraging State prize from the by the Academy of Scientific Research and Technology, then in 2017 a prize of National Centre for Research in Advanced Sciences. I am the co-Founder and the Head for High Throughput Molecular and Genetic Technology lab in the Centre of Excellences and Advanced Sciences, National Research Centre which is facilitated with next generation sequencers and microarray systems

Inc-mirRNA as Liquid Biomarker for Diagnosis and Prognosis of Breast Cancer

Objective: Aberrant expression of miRNAs, small non-coding RNAs of 19 to 23 nucleotide, has been reported in different types of cancer, among them breast cancer. Authors aim to investigate the role of a panel of circulating miRNAs as a diagnostic and prognostic biomarker for breast cancer.

Materials and Methods: Expression level of a panel of miRNAs (miRNA- 21, 27, 126, 155, 335) was measured in primary breast cancer patients (n = 200), patients with benign breast lesion (n = 50) and healthy individuals as control (n = 40) using quantitative real-time polymerase chain reaction and its diagnostic efficacy, relation with clinicopathological factors, and survival outcome were assessed.

Results: Significant increase in expression level of miRNA 21, 27 and 155 was reported in patients with breast cancer as compared to the other two investigated groups, while the expression for miRNA-126 and 335 was decreased in patients with breast cancer as compared to the other two investigated groups. The positivity rates for investigated miRNAs were related to clinic-pathological data as Factors as clinical staging, histological grading, metastasis to lymph node, tumor size, ER receptor and HER-2/neu. increased miRNA- 21, 27 and miRNA-155 and decreased miRNA-126 and miRNA 335 expressions had significantly worse disease-free survival, while only miRNA-21, -126 and miRNA -335 showed poor OS (P< 0.005).

Conclusion: Assessment of circulating miRNA expression level is a promising minimal invasive marker for diagnosis and prediction of breast cancer prognosis with significant discrepancies among molecular breast cancer subtypes.



Lailil Muflikhah

Brawijaya University, Indonesia

Biography

Lailil Muflikhah, S.Kom., M.Sc., is a senior Lecturer in Brawijaya University. Her bachelor's degree is in Engineering Informatics, ITS Surabaya Indonesia. Her master's degree in Information Technology, Universiti Teknologi Petronas, Malaysia. She has an experience as a head of the Computational Intelligence and Visualization Laboratory, Faculty of Computer Science, Brawijaya University. Furthermore, she continued her study in the Biology Department, Faculty of Mathematics and Natural Sciences with a dissertation topic on Bioinformatics for Hepatoma detection using Enhanced Machine Learning Algorithms. Now, her research areas are in bioinformatics, data mining, and artificial intelligence.

Machine Learning and Massive Data for Profiling Liver Cancer Disease: Trends and Challenges

This survey paper is purposed to give information for the state-of-the-art involved machine learning algorithm to solve the problem of profiling liver cancer disease using massive data set. The rapid development of information technology makes it easy to obtain a large amount of data. Machine learning is a method from generated data sets to make a machine learn. The data included clinical data symptoms), images (MRI scan), free text (prescription, nucleotide sequence data), and numerical data (microarray). The field has been attracting great attention due to the number of benefits can provide society with. In this paper, we considered the influence of big data on the field, several problems associated with massive data sets in liver cancer disease, and the progression of machine learning methods for preprocessing the data, classification, prediction, and detection as well as evaluation measurement to solve these problems. In preprocessing data, the research is addressed to improve the data quality. We analyzed the most used machine learning for profiling the disease including dimension reduction such as feature extraction and selection to increase the performance result for prediction or description methods. Several trends of the methods such as K-Nearest Neighbor, Naïve Bayes, Decision Tree, Support Vector Machine (SVM), and ensemble method, Random Forest algorithm. Also, several related evaluation measurements are involved to know the appropriate performance of the related methods.



Syeda Afshan

Turku University Hospital, Finland

Biography

Syeda Afshan has a Bachelor of Engineering in Biotechnology and Post Graduate Diploma in Cellular and Molecular Diagnostics from India. She received fellowships from Department of Biotechnology, Govt. of India to pursue her thesis projects in the field of cancer research at HCG Cancer Hospital, and at National Centre for Biological Sciences, Bangalore, India. She then received an opportunity to pursue her PhD at University of Turku, Finland in the "Translational Research Network for Prostate Cancer" a Marie Skłodowska-Curie Innovative Training Network (ITN) funded by the European Commission. She is a member of European Association for Cancer Research (EACR) and Turku Cancer Research Society, which promotes collaborations. She has been on research visits to Queen's University, Belfast and Medical University of Lublin, Poland. She has successfully supervised two master thesis projects. She has also received various grants for her research projects and to present her work at international conferences,

Increased Expression and Altered Cellular Localization of Fibroblast Growth Factor Receptor Like 1 (FGFRL1) Are Associated with Prostate Cancer Progression

The signaling-competent transmembrane tyrosine kinase Fibroblast growth factor receptors (FGFRs) 1–4 are involved in prostate cancer (PCa) regulation. The fifth receptor FGFR like-1 (FGFRL1), also known as FGFR5, does not have a functional tyrosine kinase domain. The role of FGFRL1 in PCa is unclear. The RNA and protein expression of FGFRL1 obtained with qRT-PCR and immunohistochemistry of patient tissue microarrays (TMAs) respectively, and correlated with clinical patient data. The effects of FGFRL1 knock-down (KD) were observed in cell line PC3M in in vitro culture models and in mouse xenograft tumours. The results indicate that FGFRL1 was significantly upregulated in PCa. The expression of FGFRL1 on cell membrane decreased with high Gleason scores, while there was an increase in the cytoplasmic and nuclear levels of FGFRL1. The Cox regression analysis indicated that nuclear FGFRL1 was an independent prognostic marker for biochemical recurrence after radical prostatectomy. The FGFRL1-KD in PC3M cells increased FGFR signalling, whereas FGFRL1 overexpression reduced it, supporting decoy receptor actions of membrane-localized FGFRL1. In accordance with clinical data, FGFRL1-KD markedly suppressed PC3M xenograft growth. The RNA sequencing of FGFRL1-KD cells and xenografts revealed alterations in genes regulating differentiation, extracellular matrix, and tumour-stroma interactions related to decreased growth in FGFRL1-KD xenografts. Our results suggest that the upregulation and altered cellular localisation of FGFRL1 has significant effects on PCa progression. The nuclear FGFRL1 has potential as a prognostic biomarker.



Afsheen Raza

National Center for Cancer Care and Research (NCCCR), Qatar

Biography

Afsheen Raza is currently working as Post-Doctoral Research Scientist in Translational Cancer Research Institute, National Center for Cancer Care and Research, Hamad Medical Corporation, Qatar has 16 years research experience, 40+ peer-reviewed publications, author of 3 book chapters, editor for Intech Open Book on Immune checkpoint inhibitors, PLOS One, Frontiers in Immunology and Biomarker Insights. She has done PhD in Molecular Biology from The Aga Khan University, Pakistan. She was certified on Cancer Biology and Therapeutics from Harvard Medical School, USA. Her primary research focus on Tumor-host immune interactions to immunotherapeutic strategies, establishing immune-monitoring platforms, developing tools to evaluate novel immune modulators of cancer antigen specific immune cells for translational research, Studying biomarkers of response in immunotherapy treated patients, Main area of interest- Lung Cancer, Head and Neck Cancers and Gastric cancer.

Pre-treatment serum profiling of immune checkpoint mediators as predictive biomarkers of response in Non-Small cell lung cancer patients treated with anti-PD-1/PD-L1

Background: There is limited data on the predictive biomarkers of response to immune checkpoint blockade (ICB) treatment of non-small cell lung cancer (NSCLC) patients. The main aim of this prospective study was to understand the utility of pre-treatment soluble

immune checkpoint markers as surrogate markers for tissue PD-L1 and as predictors of response in locally advanced/metastatic NSCLC patients treated with ICBs.

Methods: The study was conducted at the National Center for Cancer Care and Research (NCCCR), HMC, Qatar. A total of 31 patients on anti PD-1/PD-L1 and chemo-immunotherapy were enrolled and blood samples were collected before treatment. Multiplex Magnetic Bead Panel kits were utilized. The kits included the following soluble analytes:

- Immune stimulatory/inhibitory checkpoint markers to detect soluble forms of proteins that play a crucial role in the regulation of T cells, leading to either T cell exhaustion or stimulation including CD27, CD28, CD137 (4-1BB), GITR, HVEM, BTLA, CD80, CD152 (CTLA4), IDO, LAG-3, PD-1, PD-L1, PD-L2, TIM-3.
- NK cell checkpoint molecules that regulate NK cell activation against tumor cells by the balance of inhibitory or activating signals including MICA, MICB, Perforin, ULBP-1, ULBP-3, ULBP-4, Arginase-1, CD73 (NT5E), CD96 (Tactile), E-Cadherin, Nectin-2, PVR, Siglec-7, Siglec-9.
- B7 family of immune checkpoint regulators expressed for controlling and suppressing immune responses of T cells and NK cells. The markers included B7-H6, CD276 (B7-H3), CD47 (IAP), CD48 (BLAST-1) CD134 (OX40), ICOS Ligand (B7-H2), TIMD-4, S100A8/A9, VISTA.
- Circulating Cancer Biomarkers to detect soluble markers for treatment dynamics including CA-125, CA-15-3, CA-19-9, CEA, CYFRA-21, AFP, Total PSA, TRAIL, Leptin, HGF, Sfas, Prolactin, SCF, OPN

Biorad 200 system was utilized to measure the concentration of the soluble markers. Median plus IQR values were calculated for each tested marker. Clinical response to treatment was evaluated using imaging (PET CT) data obtained after 4-8 months after treatment. Cutoff values for each marker was calculated using ROC curve analysis. Association analysis between each marker and patient demographics and treatment response was calculated using Chi square test. Tissue PD-L1 status of enrolled patients was re-

trieved from the Electronic medical record (Cerner) and correlated with the tested biomarkers by Pearson correlation analysis. Mann Whitney test was utilized to test the differences in concentration of soluble markers in Tissue PD-L1 positive patients and responders' vs. Non-responders. Kaplan Meier curves were used for Progression Free Survival analysis. All statistical tests were conducted using Graph Pad Prism 9.0. P value <0.05 was considered significant.

Results: Association analysis of biomarkers with patient demographics/clinic-pathological characteristics and treatment response:

Based on the cutoff values of biomarkers, significant association was observed for the following markers: CD27(>1056 pg/ml), Total PSA (>129 pg/ml), CA 15-3 (>9.56 U/ml), CA 125 (>8.80 U/ml), HGF (>242.9 pg/ml), MICA (>38.62 pg/ml), CA-19-9 (> 19.71 U/ml), TPD-L1 > 50%, sPD-L1 (>2.45 pg/ml), AFP (> 644.2 pg/ml) were significantly associated with age more than 60 years, males, smokers, arab ethnicity, adenocarcinoma, stage 4, TPD-L1 <50%, presence of brain and pulmonary metastasis, previous history of radiotherapy and previous use of more than one line of chemotherapy.

Furthermore, significant association of TPD-L1 positivity (0.0373*) and Stage 3 (0.0373*) was observed in treatment responding patients.

Expression of soluble markers in TPD-L1 <50% vs. > 50%:

In TPD-L1 <50% expressing patients, the expression of immune inhibitory markers was significantly up regulated in Singlec 7 (0.0107*), Singlec 9 (0.0033**), ULBP4 (0.0075**) and VISTA (0.0231*) while in patients expressing TPD-L1 > 50% immune inhibitory marker PD-L2 was significantly up regulated.

Correlation analysis of serum biomarkers with Tissue PD-L1 > 50%:

Correlation analysis showed significant correlation of serum PD-L1 (0.0472*), CD27 (0.0228*) and CD28 (0.0323*). However, inverse correlation was observed in co-stimulatory marker ICOS Ligand (0.0029**).

Expression of soluble biomarkers in Tissue PD-L1 > 50% patients stratified according to treatment response:

Significant down regulation of immune-inhibitory markers; PD-L2 (0.0252*), TIMD4 (0.0368*), CEA (0.0431*) and Nectin 2 (0.0120*) was observed in responding patients.

Expression of soluble markers in Responders vs. Non-Responders:

Significant down regulation of immune-inhibitory markers; CD80 (0.0225*), TIMD4 (0.0330*), CEA (0.0083**) and CYFRA 21-1(0.0101*) was observed in responding patients. Furthermore, it was observed that patients on anti-PD1/PD-L1 treatment mono-therapy showed significant down regulation of immune-inhibitory markers PD-L2 (0.0400*), CD80 (0.0152*), TIM-3 (0.0400*) and Nectin 2 (0.0426*) in responding patients. No significant up/down regulation of soluble markers was observed in patients on Chemo-immunotherapy.

Association analysis further showed that CEA concentration less than cutoff value of 672pg/ml is significantly associated with treatment response (p value: 0.0075**) (Sensitivity= 79, Specificity= 100%).

Kaplan Meier curves for Progression Free Survival analysis:

Survival analysis showed that CEA concentration < 672pg/ml (0.0098**), CD 80 <63.34pg/ml, TIMD4<438.9pg/ml and CYFRA 21-1<964.5pg/ml is associated with progression free survival with progression free survival.

Conclusion: The study gives evidence of significant changes in the pre-treatment serum concentrations of soluble markers in the NSCLC patients on immune checkpoint blockade therapy indicating the utility of these soluble biomarkers as surrogate markers for tissue PD-L1 as well as plausible biomarkers of response to immune checkpoint blockade treatment.



Anas Shamsi

Jamia Millia Islamia, India

Biography

Anas Shamsi is a young aspirant from India, working in the field of public health, cancer therapeutics, drug discovery, protein chemistry, protein biophysics, protein folding, and aggregation and protein-drug interactions. I hold Ph.D. (Biochemistry), awarded from Aligarh Muslim University in 2018 and currently working as a Dr. D.S. Kothari Postdoctoral Fellow (UGC, Govt. of India) under the mentorship of Dr. Asimul Islam at Center for Interdisciplinary Research in Basic Sciences, Jamia Millia, New Delhi, India. My current research focus is on therapeutic strategies targeting cancer and neurodegenerative disorders in terms of protein biochemistry and drug discovery.

Cancer therapeutics research is largely focused on the identification of novel small molecules that can serve as potential leads in drug discovery. The focus of the group is finding potent and selective new therapeutic agents through the generation, integration, and translation of scientific knowledge. The other aspect of my work is studying the proteins that contribute to biological dysfunctions with a focus mainly devoted to cancer and Alzheimer's disease. This domain provides an insight into cancer therapeutics and Alzheimer's therapy.

Another part of current research focuses on structure-based drug discovery. Structure-based drug design has become a useful and essential part of the drug discovery and possibly the most relevant approach to discover bioactive leads exhibiting high specificity and effectiveness. To date, I have more than 80 publications in international peer reviewed journals highlighting my research skills with a h-index of 21 and i10 index of 44 with more than 1500 citations.

Rosmarinic Acid Exhibits Anticancer Effects via MARK4 Inhibition

Microtubule affinity regulating kinase (MARK4) is a potential drug target for different types of cancer as it controls the early step of cell division. In this study, we have screened a series of natural compounds and finally identified rosmarinic acid (RA) as a potential inhibitor of MARK4. Molecular docking and 500 ns all-atom simulation studies suggested that RA binds to the active site pocket of MARK4, forming enough number of non-covalent interactions with critical residues and MARK4-RA complex is stable throughout the simulation trajectory. RA shows an excellent binding affinity to the MARK4 with a binding constant (K) of 107 M^{-1} . Furthermore, RA significantly inhibits MARK4 activity ($\text{IC}_{50} = 6.204 \mu\text{M}$). The evaluation of enthalpy change (ΔH) and entropy change (ΔS) suggested that the MARK4-RA complex formation is driven by hydrogen bonding and thus complexation process is seemingly specific. The consequence of MARK4 inhibition by RA was further evaluated by cell-based tau-phosphorylation studies, which suggested that RA inhibited the phosphorylation of tau. The treatment of cancer cells with RA significantly controls cell growth and subsequently induces apoptosis. Our study provides a rationale for the therapeutic evaluation of RA and RA-based inhibitors in MARK4 associated cancers and other diseases



Utkarsha L Mohite

MET's League of College, India

Biography

UtkarshaLaxmanMohite is an Assistant Professor from MET's League of Colleges, Bhujbal Knowledge City. Completed Ph.D. from Sardar Vallabhbhai National Institute of Technology, in 2022. She received her B.E degree in Electrical Engineering from SPPU University, India, 2010, and the M.E degree in Electrical Control Systems from SPPU University, Pune, India, 2014. Her research interests are optimization techniques with respect to control system. Adaptive, robust and optimal control.

Non-linear Error Function based Extended Kalman Filter with Improved Scaling Factor for Cancer Chemotherapy

Amongst the various treatment models, the most significant method on curing the death causing disease like cancer is chemotherapy it is the most significant and widely used.

In this research we can control the amount of major biological cell types normal, immune and tumor cells under uncertainty in different parameters in cancer model. A new Nonlinear Error Function based Extended Kalman Filter (EKF) with Improved Scaling Factor (NEF-EKF-ISF) is designed in a work, the error is found using conventional difference function and it is used for the updating process of EKF. Here, the updating process is based on the error function. In addition, with that a scaling factor is introduced which considers the error improvement, for the updating process. The proposed controller is evaluated over other traditional approaches which will impactful for drug dosage injection on normal, immune and tumor cells. It is also guaranteed that the proposed NEF-EKF-ISF does a robust performance on parameter uncertainties.

Scholars World Congress on

CANCER RESEARCH AND ONCOLOGY

A large red circle with a dark blue border, containing the text 'E-Posters Day 2'. A thin red line connects the top of the circle to a thick red horizontal bar above it.

**E-Posters
Day 2**





Alhumam Alkhusheh

University of Nottingham, UK

Biography

Alhumam Alkhusheh is currently a fourth year medical student at the University of Nottingham. He graduated with a first class distinction in his Bachelor of Medical Sciences with Honours in Medicine degree (B-MedSci) during his third year of medical school. He finished school with all A* grades at both GCSE and A level, before embarking on the start of his medical career.

Investigating the effect of the PRH transcription factor on gene expression in bile duct cancer cells

Background: The proline rich homeodomain (PRH) protein is one of the few discovered proteins that cannot be classified exclusively as an oncogene or a tumour suppressor. It is proposed to have dual tumour suppressive and oncogenic action, dependent on location and condition. Both overexpression and

downregulation of PRH have led to increases in malignancy. Bile duct cancer, also known as cholangiocarcinoma (CCA), is an example of overexpression of PRH acting in an oncogenic manner.

Objectives: The primary aim of the study was to use data analysis techniques to identify directly regulated genes by PRH in CCA and observe how PRH interacts with these genes.

Methods: A variety of data analytical methods were implemented on RNA sequencing and chromatin immunoprecipitation (ChIP) sequencing datasets, obtained from experiments on a human CCA cell line (CCLP1). The overlap between both datasets determined which genes are directly regulated by PRH.

Results: A set of 74 genes, directly regulated by PRH, was curated. Of these, 6 repeatedly emerged in Gene Set Enrichment Analysis (GSEA) results, revealing enrichment in multiple different signature gene sets. These 6 genes were investigated and discussed: Integrin Beta 4 subunit (ITGB4), Krupperlike Factor 5 (KLF5), SRY-Box Transcription Factor 9 (SOX9), GATA binding protein 3 (GATA3), Regulator of G Protein Signalling 1 (RGS1) and Regulator of G Protein Signalling 2 (RGS2).

Conclusions: Further evidence was shown to prove the simultaneous action of PRH as an oncogene and tumour suppressor, whilst proposing several new links between PRH and these genes, unbeknownst to current literature. The identification of the genes discussed warrants further investigation and exploration into their potential as novel biomarkers or therapeutic targets in CCA.

Aadilah Omar

University of the Witwatersrand, South Africa

Taking down the metastatic mothership: Gene expression analysis of Cancer Stem Cells following treatment with Sonic Hedgehog inhibitors

Cancer stem cells (CSC's) a small sub-population of solid tumours are proposed to initiate tumorigenesis and to provide a source of metastatic cells. In being resistant to different therapies, they may proliferate and repopulate tumours, leading to patient relapse. As the Sonic Hedgehog Pathway (Shh) is important in stem cell survival, we assessed its regulatory role in colorectal CSC's, targeting it with small molecule inhibitors. CSC's were isolated from HT29 and DLD1 colon adenocarcinoma cells using the CD133 cell surface protein. Cellular response to the Hedgehog (Hh) inhibitors, cyclopamine and the synthetic analog

SANT-2 were evaluated, as compared to the control molecule tomatidine. Cyclopamine and SANT-2, antagonists of Smoothed (SMO), significantly decreased cell adhesion of both DLD1 and HT29 CSC's; and invasion of the DLD1 and HT29 CSC's through a laminin matrix was significantly retarded with treatment. Also, SANT-2 impeded cell migration, in both DLD1 and HT29 CSC's. These results then prompted further investigation with respect to the modulation of CSC genes following treatment with Shh inhibitors. A gene expression array was used to detect the up-regulation and down-regulation of CSC genes and our findings will be revealed. The next step would be to perform protein expression studies, since changes in gene expression don't necessarily equate to alterations in protein expression. Together, these tools would permit for a finer evaluation of the Shh inhibitors as a promising therapeutic tool for the treatment of metastatic colorectal cancer and CSC's.

Upcoming Conferences

<p>3rd Edition Scholars International Neuroscience and Brain Disorders Forum March 27-28, 2023 London, UK https://scholarsconferences.com/neuroscience/neuroscience@scholarscongress.org</p>
<p>2nd Edition Scholars International Webinar on Optics, Photonics and Lasers March 27-28, 2023 London, UK https://scholarsconferences.com/optics-photonics-lasers/optics@scmeet.org</p>
<p>2nd Edition Scholars International Conference on Physics and Quantum Physics March 27-28, 2023 London, UK https://scholarsconferences.com/physics/david@scmeetings.org</p>
<p>Scholars Frontiers in Nanoscience and Nanotechnology Congress March 27-28, 2023 London, UK https://scholarsconferences.com/nanoscience-nanotechnology/nanotek@scmeet.org</p>
<p>5th Edition Scholars Frontiers in Chemistry Forum March 29-30, 2023 London, UK https://scholarsconferences.com/chemistry-frontiers/dileep@scholarsconferences.com</p>
<p>4th Edition Scholars International Conference on Catalysis and Chemical Engineering March 29-30, 2023 London, UK https://scholarsconferences.com/catalysis-frontiers/catalysis@scmeetings.org</p>
<p>Global Summit on Oil, Gas, Petroleum Science and Engineering March 29-30, 2023 London, UK https://petroleumscienceconference.com/organizer@petroleumscienceconference.com</p>
<p>Scholars World Congress on Material Science and Engineering June 19-20, 2023 Paris, France https://materialssciencemeet.com/organizer@materialssciencemeet.com</p>
<p>World Biopolymers & Polymer Chemistry Congress June 19-20, 2023 Paris, France https://polymerscience.scholarsconferences.com/biopolymers@materialssciencemeet.com</p>

<p>6th Edition World Congress on Drug Delivery and Nanomedicine June 19-20, 2023 Paris, France https://scholarsconferences.com/drugdelivery-nanomedicine/drugdelivery@scholarconferences.org</p>
<p>4th World Congress on Advances in Mental Health and Psychiatry June 21-22, 2023 Paris, France https://mentalhealth.scholarsconferences.com/mentalhealth@scholarconferences.org</p>
<p>World Congress on Otology, Rhinology & Laryngology June 21-22, 2023 Paris, France https://otorhinolaryngology.scholarsconferences.com/otorhino@scholarconferences.org</p>
<p>4th Edition Global Summit on Breast and Women's Cancer June 21-22, 2023 Paris, France https://breast-womens-cancer.scholarsconferences.com/cancerscience@scmeetings.org</p>
<p>3rd World Congress on Nursing and Advanced Healthcare June 21-22, 2023 Paris, France https://nursingworldcongress.com/organizer@nursingworldcongress.com</p>
<p>2nd Edition Scholars World Congress on Cancer Research and Oncology October 23-24, 2023 Tokyo, Japan https://scholarsconferences.com/cancer-oncology/cancerscience@scmeetings.org</p>
<p>2nd Edition Scholars International Conference on Gynecology, Obstetrics & Women's Health October 23-24, 2023 Tokyo, Japan https://scholarsconferences.com/gynecology-obstetrics/gynecology@frontiersevents.com</p>
<p>7th Edition Scholars World Heart Congress October 23-24, 2023 Tokyo, Japan https://cardiologymeet.org/heartcongress@scholarsconferences.org</p>
<p>7th Edition International Conference on Pharmaceutics and Novel Drug Delivery Systems October 25-26, 2023 Tokyo, Japan https://scholarsconferences.com/pharmaceutics-drugdelivery-research/victor.oliver@scholarsconferences.com</p>

**WE WISH TO
SEE YOU AGAIN AT**

2nd Edition Scholars World Congress on

Cancer Research and Oncology

October 23-24, 2023 | Tokyo, Japan

<https://scholarsconferences.com/cancer-oncology/>

Hosted By:

Jeo Sheard | Program Manager

Cancer Science 2023

21 Clifton Road, Newcastle Upon Tyne, England,

United Kingdom, NE4 6XH

cancerscience@scmeetings.org

+447426060443

