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## Magnetic nanotherapeutics of guerin carcinoma

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The aim of the paper is the research and bioengineering analysis of antitumor effects of magnetic nanotherapeutics initiated by nonuniform constant magnetic and electromagnetic fields on experimental tumor models of guerin carcinoma. Experimental animals were treated by doxorubicin (DOX) in the dose 1.5 mg/kg and MNC in the dose 3.5 mg/kg. The treatment was performed three times by DOX, electromagnetic irradiation (EI) from 9 to 13 days after tumor transplantation every 48 hours. Tumor size was measured by the caliper. Tumor volume before treatment was 0.82±0.14 cm³. Drugs were injected directly into the tumor. In the research of animals with guerin carcinoma was shown, that magneto-mechano-chemically synthesized magnetic nanocomplex on the basis of Fe<sub>3</sub>O<sub>4</sub> nanoparticles with antitumor anthracycline row antibiotic doxorubicin and next local EI by spatially inhomogeneous constant magnetic and variable electromagnetic fields had a greater antitumor effect than conventional DOX and magneto-mechano-chemically synthesized magnetic nanocomplex without EI.

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## Preclinical studies on the development of experimental models for studying the molecular and immunological aspects of tumors including brain tumour

Pranab K. Das

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This lecture will address principally the cellular and molecular immunopathological-aspects of glyoma; and the experimental approaches for establishing the appropriate bench model to develop the immunotherapeutics as a personalized medicine. In addition to these subjects, attendees of this lecture will be familiarized with the need for testing the efficacy of immunotherapeutics, for an individual glyoma can be applied when treating brain tumor patients. Such approach might be applied for other Cancer such as bladder cancer, melanoma. The experimental techniques such as organo-typic (spheroid) and histio-typic monolayer glyoma cell cultures and the identification molecular markers for improved diagnosis will be discussed.

## **Biography**

Pranab K. Das has mainly studied inflammation and immunity. In parallel, he studied tumor molecular biology including brain tumour and development of therapeutics. During the progression of his career covering cancer, infection / immunity, gene expression, he authored more than 200 scientific articles published in peer reviewed journals. He has served on numerous review committees for the European research programmes.

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## Temari Reiki: A new hands-off approach to traditional Reiki

Jane Stewart Townsend

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This paper encapsulates the history of Reiki, an ancient healing art, from its origins in Japan to current practice in the United States. It defines Reiki therapy and discusses the development of a new Reiki method called *Temari Reiki* and the use of two additional chakras. Lastly, sample clients scenarios are provided. Because of the success of *Temari Reiki* in the practice, recommendations include that it be integrated as therapy to augment traditional Western medicine-based patient care plans for patients with cancer, pain, stress and other disabling health issues. Also, additional research using randomized clinical trials is recommended to examine the benefits of *Temari Reiki* for improving patients' well-being in mind, body and spirit.

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