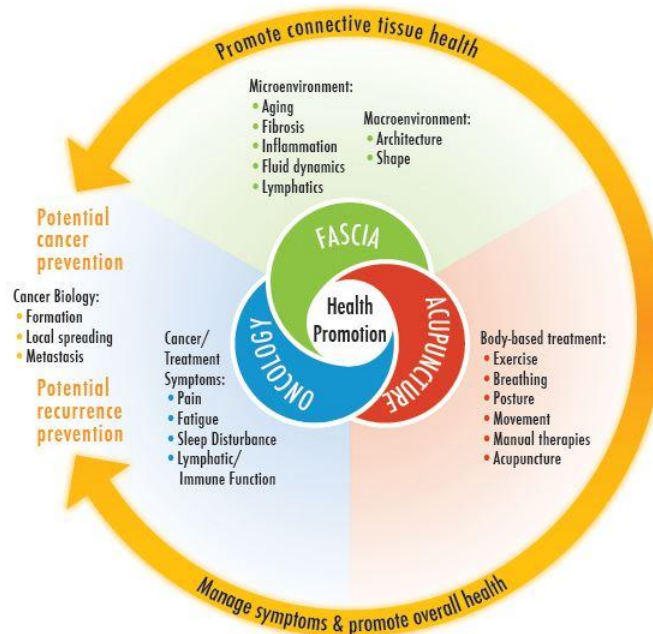




On Saturday, November 14<sup>th</sup>, 2015, the **Society for Acupuncture Research (SAR)**, **Society for Integrative Oncology (SIO)** and the **Fascia Research Society (FRS)** will jointly host an unprecedented one-day event exploring three key areas of overlap in research on acupuncture, oncology and fascia:

- **Acupuncture and oncology:** Role of acupuncture in the care of cancer patients including the management of pain, fatigue and sleep.
- **Oncology and fascia:** Importance of the connective tissue matrix in tumor growth and metastasis.
- **Fascia and acupuncture:** Transduction of mechanical signals from acupuncture needles to connective tissue.

The one-day joint conference will synthesize clinical and basic science research that highlights the importance of connective tissue in cancer biology and the role of acupuncture in an integrated approach to health promotion and cancer prevention.



### Joint conference on Acupuncture, Oncology and Fascia:

The goal of the joint conference will be to explore the themes and research areas outlined above. Experts in the fields of acupuncture, integrative oncology, cancer biology and mechanobiology will share the stage, present their latest findings and participate in unprecedented discussions. This forum will result in cross-fertilization across fields that have never before intersected in such a way. The Osher Center for Integrative Medicine is sponsoring this conference as part of its mission to expand the scope of integrative medicine and address new ideas in basic and translational science inspired by alternative medicine concepts and practices.

## **Acupuncture and integrative oncology:**

Acupuncture has been used for the management of symptoms resulting from cancer and cancer treatments since the 1970s when it began to be used for relief from nausea and vomiting induced by chemotherapy. Since then, acupuncture has established itself within a cadre of integrative medicine treatments for chronic pain and constitutional symptoms such as fatigue and sleep disturbance. Integrative oncology incorporates acupuncture and other complementary therapies with lifestyle management including dietary counseling and exercise. Interest in exercise and other movement-based therapies in the care of cancer patients is growing, especially given the mounting evidence that exercise not only can help with symptoms but also improves survival and decreases tumor recurrence (**see red arrow in above diagram**).

## **Fascia, mechanobiology and cancer:**

Fascia is unique in the body in that it forms a continuous network of connective tissue that “connects” every other tissue, organ and cell type and plays an important role in immune and lymphatic function. Fascia is also part of the musculoskeletal system and, as such, participates and responds to mechanical forces during changes in posture and body movement. Importantly, lack of movement affects fascia, which becomes stiff and fibrotic when immobilized, especially in the presence of inflammation. Our understanding of mechanobiology, or the effect of mechanical forces on tissues, is lagging behind our understanding of biochemistry, but is rapidly gaining attention, and nowhere faster than in the field of cancer. We now understand that the connective tissue or “stroma” plays a very important role in cancer biology (**see green arrow in above diagram**).

In recent years, rapid progress has been made in our knowledge of how tissue stiffness and mechanical forces influence the growth of cancer cells and their ability to spread and metastasize. Fibrosis, which develops as a result of chronic inflammation, renders tissues stiff and more prone to cancer. A very important question that will be explored at this conference is whether the increased survival and decreased cancer recurrence with exercise might be due to direct mechanical effects on connective tissue.

## **Acupuncture, body-based treatments and fascia:**

Acupuncture needles have been shown to act as mechanical probes that bind to connective tissue and stretch it “from the inside” during manipulation of the needle. Thus, acupuncture may share common mechanisms with other body-based treatments applying mechanical forces to tissue such as manual therapy, stretching and yoga. There is evidence that stretching of connective tissue can reduce both inflammation and the fibrotic response that occurs after injury. This evidence supports the idea that direct stretching of connective tissue could promote connective tissue health, and, as a result, influence the growth and behavior of cancer cells.

## **Find out more about the Joint Conference on Acupuncture, Oncology and Fascia:**

**Information:** Osher Center for Integrative Medicine: [HMSOsherCenter@partners.org](mailto:HMSOsherCenter@partners.org) ; 617.525.8737.

**Registration:** Tickets are available from the **Society for Acupuncture Research (SAR)**, the **Society for Integrative Oncology (SIO)** and the **Fascia Research Society (FRS)**. The links listed below lead to registration sites hosted by SAR, SIO and FRS. The cost of the Joint Day Conference on Saturday, Nov. 14, 2015, is part of a package rate for attending the full society annual conferences for either SAR or SIO.

[SAR Registration](#) via “Reaching Across Disciplines to Broaden the Acupuncture Research Network.”

[SIO Registration](#) via “12<sup>th</sup> International Conference: Integrative Innovation.”

[FRS Registration](#) via “4<sup>th</sup> International Fascia Research Conference.”

