

ICL-QUESTIONNAIRE

NAME: **Benjamin Shapiro**

GRANT PERIOD: **Sept-Oct 2009, Summer 2010**

PRESENT POSITION US: **Associate Professor, University of Maryland at College Park**

BORN: **Jerusalem, Israel**

LANGUAGES: **English, Hebrew, Russian**

GERMAN HOST INSTITUTION

Cecilienklinik, 33175 Bad Lippspringe, Germany

ACADEMIC DISCIPLINE

Engineering, Medicine

AREAS OF RESEARCH

Control of Magnetic Drug Delivery to Deep Tumors

POSSIBLE LECTURE TOPICS

Between Engineering and Medicine: Control to Put Chemotherapy Drugs Where They Need To Go

ACADEMIC TRAINING AND DEGREES

Sabbatical, National Cancer Institute (2009)

Biology Boot Camp, California Institute of Technology (Summer 2007)

PhD (engineering), California Institute of Technology (1995-1999)

B.S. (engineering), Georgia Institute of Technology (1991-1999)

PREVIOUS POSITIONS

Engineering Associate Professor, University of Maryland at College Park

PUBLICATIONS (selected)

Taken from 1 edited book, 2 book chapters, 23 journal publications, 43 conference papers, and 14 patents.

B.Shapiro, “**Towards Dynamic Control of Magnetic Fields to Focus Magnetic Carriers to Targets Deep Inside the Body**” (from Proceedings of the 7th International Conference on the Scientific and Clinical Applications of Magnetic Carriers), *Journal of Magnetism and Magnetic Materials*, vol 321, no 10, pg 1594-1599 , 11 May 2009.

B.Shapiro, R.Probst, H.E.Potts, D.A.Diver, A.S.Lubbe, “**Dynamic Control of Magnetic Fields to Focus Drug-Coated Nano-Particles to Deep Tissue Tumors**”, *7th International Conference on the Scientific and Clinical Applications of Magnetic Carriers*, Vancouver, BC, 21-24 May 2008. [Conference paper, peer reviewed.]

B.Shapiro, R.Probst, H.E.Potts, D.A.Diver, A.S.Lubbe, “**Control to Concentrate Drug-Coated Magnetic Particles to Deep-Tissue Tumors for Targeted Cancer Chemotherapy**”, *46th IEEE Conference on Decision and Control*, pg 3901-3906, New Orleans, LA, 12-14 Dec 2007. [Conference paper, peer reviewed.]

B.Shapiro, H.Potts, D.Diver, R.Probst, “**Methods and Systems for Magnetic Focusing of Drugs to Deep Tumors**”. *Provisional patent filed 11 Dec 2007. Patent disclosure submitted to Office of Technology Commercialization at the University of Maryland on 12 March 2007.* [Patent application.]