

Nanotechnology for Medicine in Poland

Jarosław Piekarski, Ph. D.

Nanosciences, nanotechnologies, materials & new production technologies

National Contact Point for Research Programmes of the EU









Activity of Polish teams in FP7 nano and nanomed projects

Evaluated calls: 2007 and 2008

4 topics for medical applications

Participation of **Polish teams** in 2nd stage:

2007

Nano-related projects: 16 (7 supported)

med-relaed projects: none

2008

Nano-related projects: 8 (3 supported)

med-relaed projects: **1** (**0** supported)





NMP-2007-2.3-1: Highly porous bioactive scaffolds controlling angiogenesis ...

NAS partners: 7

NMP-2007-4.0-4: Nt-based systems for in-vivo diagnosis and therapy

NAS partners: 4

NMP-2008-2.3-1: Advanced implants and bioactive materials for critical organs none NAS partners

NMP-2008-4.0-1: Nt+based systems for diabetes, muscolo-skeletal or

inflammatory diseases

NAS partners: 3

NMP-2009-2.3-1: Biomimetic gels and polymers for tissue repair none NAS partners

NMP-2009-4.0-3: Nt+based systems for molecular diagnostics and imaging

NAS partners: 3





2nd Polish Conference on Nanotechnology NANO 2008, Cracow ~80 oral presentations, ~13 on MED. And BIO

3rd Polish Conference on Nanotechnology NANO 2009, Warsaw ~65 oral presentations, ~13 on MED. And BIO

About 15% of Polish Nano Community engaged in Med- and Bio- related research

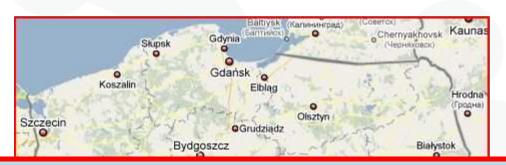




NanoMedPL

Polish Network for Nanomedicine NanoMed.pl

ZUT



UMW PW IFPAN UW UNIPRESS

UAM IFM UMP

Access to ERANET EuroNanoMed

PWr AMWr INTiBS



IFJ IKFP UJ





National Programme for R&D

Communication of Minister for Science and Higher Education 30.10.2008

Research area: **HEALTH**

nanofarmacology, targeted grug delivery

Research area: Advanced technologies for Economy

nanotechnologies in material design nanoelectronic and nanophotonics (including biomedical applications)





Structural Funds, selected project

IFPAN, Warsaw	Semiconductor nanustructures in BIO and MED.	73M PLN
EIT+, Wrocław	Nt in modern materials	108M PLN
ITE, Warsaw	Micr- and Nano-systems in Ch and BioMed	20M PLN
PW, Warsaw	New metalic materials with nanostructure	36M PLN
AGH, Cracow	Academic Center for Materials and Nanotechnology	90M PLN
IPJ, Warsaw	Detectors and accelerators of radiation (in security and medicine)	80M PLN





Examples od applications



Nanosilver for antibacterial applications



NanoCare+ (dental filling)



Nanocomponents for pharmacy



Nanocomponents for pharmacy





Thank you for your attention

Jarosław Piekarski jaroslaw. piekarski @kpk.gov. pl

National Contact Point for Research Programmes EU ul. Żwirki i Wigury 81 02-091 Warszawa, tel. 022 828 74 83 w. 344

