



Health Sciences research: Improving Lives

Loukia Tsaprouni

School of Health and Life Sciences Research

Director

Loukia.Tsaprouni@bcu.ac.uk

Research by departments



Life Sciences



Public Health



**Sport and Exercise
Science**



Radiography



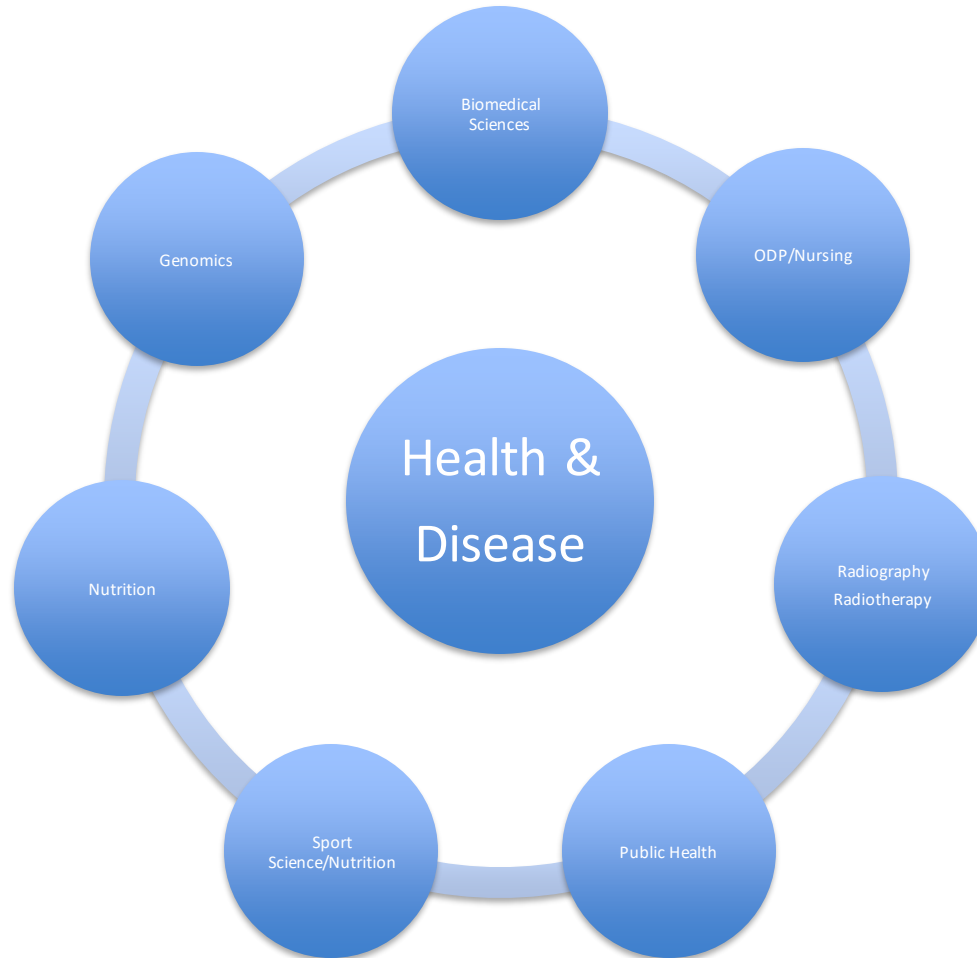
**Speech and Language
Therapy**



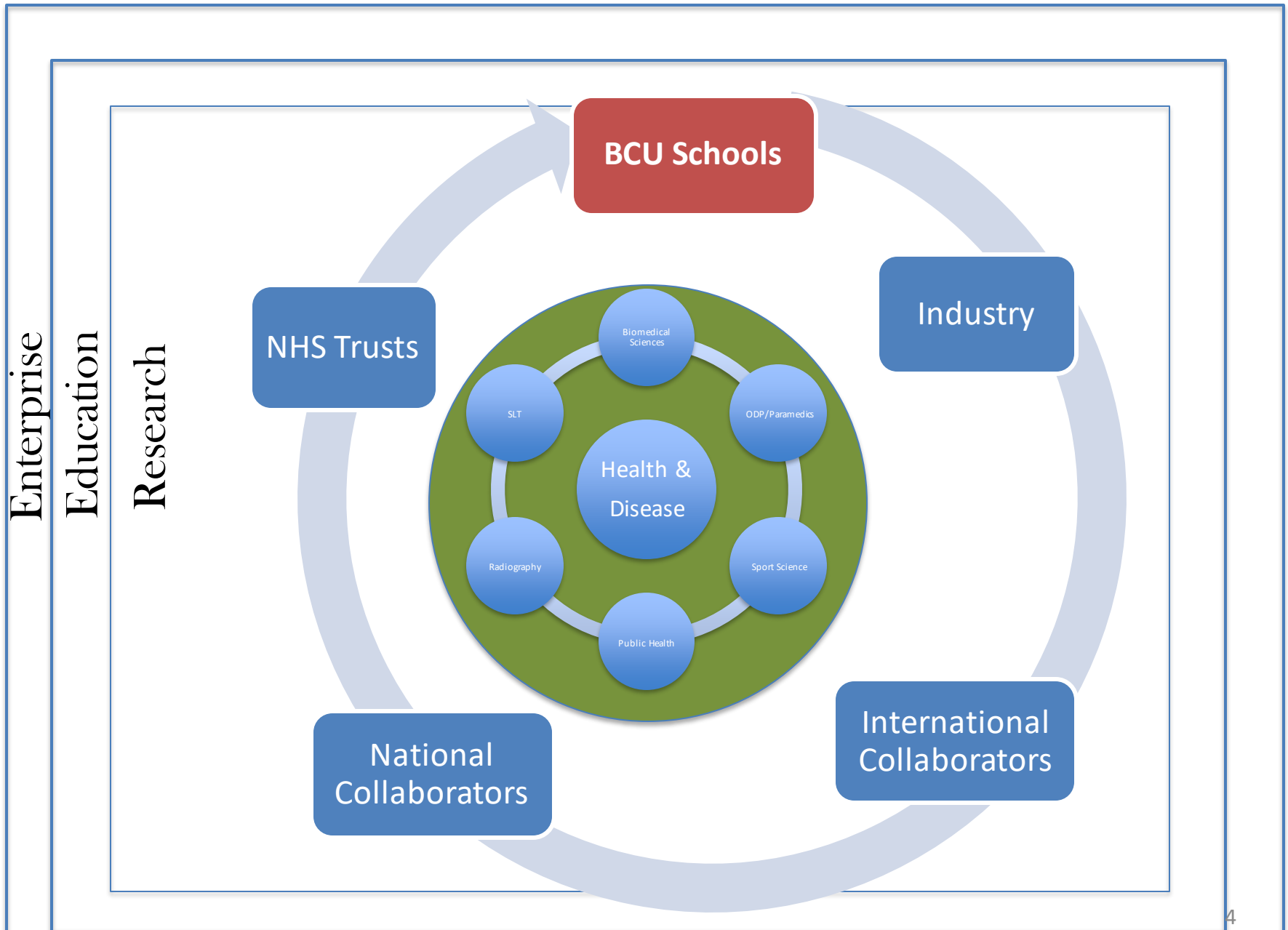
**Operating Department
Practitioners and
Paramedics**

Health Sciences Hub

Enterprise
Education
Research



Fostering Collaborations



Exercise and health

Magnesium (Mg) supplementation in female athletes, higher risk of deficiency within sporting populations.

Mg supplementation effects on functional performance in the elderly. Some new work has shown it could increase strength and therefore limit the risk of falls etc.

Mg supplementation that is associated with healthy bone structure could potentially be a control measure/intervention for some of the players that are going through their growth and maturation phase (i.e., under-12 to 16's). Does this support greater bone growth/density during this period?

Diagnostic and therapeutic radiography, and medical ultrasound

- Association between Dietary Magnesium Intake and Radiographic Knee Osteoarthritis (Chao Zeng et al 2015)
- Magnesium sulphate and magnesium sulphate solution for bowel preparation for imaging- CT and MRI
- Magnesium Sulphate in the Ultrasound-guided Supraclavicular Brachial Plexus Block (Mg) (Ashraf M Ghali 2016)- adding magnesium sulphate to lidocaine

Life Sciences



Epigenetics of respiratory diseases and addiction.

Magnesium helps decrease nicotine addiction by antagonizing NMDA receptors, which are responsible for the dopamine (reward centre) release.

Antimicrobial coatings for materials (healthcare, medical devices, space!)

Nutrition / Nutrigenomics: Nutrition and Exercise in pausing/delaying/erasing disease manifestations

SLT and Magnesium

Combined vitamin B6-magnesium treatment in autism spectrum disorder (Review)

Nye C, Blair A



This is a copy of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in The Cochrane Library 2005, Issue 1
<http://www.bloodandhoney.com>



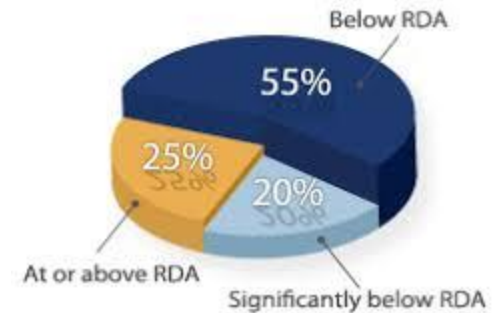
Combined vitamin B6-magnesium treatment in autism spectrum disorder (Review)
Copyright © 2005 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

Magnesium in combination with vitamin B6 are used as supplements in autism.

Improvement in speech and language skills of autistic children.

Are we getting enough Mg?

U.S. Intake of Magnesium



There has been a gradual decline of dietary magnesium in the United States, from a high of 500 mg/day at the turn of the century to barely 175–225 mg/day today. The National Academy of Sciences has determined that most American men obtain about 80 percent of the low RDA and women average only 70 percent.



Thank you and
Get in Touch!

Loukia Tsaprouni

Loukia.Tsaprouni@bcu.ac.uk