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## Hungarian presidency special issue

**State secretary for European affairs Enikő Győri on how Budapest will build on the achievements of Spain and Belgium to ensure that 2011 becomes a year of action**

*“As a former MEP, I can wholeheartedly agree that we need to restore European confidence and ambition in the EU”*

### Budapest beckons

MEP comment and analysis on the upcoming presidency priorities from Livia Járóka, Zita Gurmai, Kinga Gál, János Áder, Ádám Kósa, Edit Herczog, Elmar Brok, Ildikó Gáll-Pelcz, Victor Boştinaru, Tamás Deutsch and Zoltán Bagó



### Impact assessment

Parliament president Jerzy Buzek on the new balance of power between the EU's institutions

**Plus:** Full coverage of the Parliament Magazine's roundtable on Pensions, with Vicky Ford, Marian Harkin, Anne-Sophie Parent and Andrea Moneta



INSIDE:  
SPECIALREPORT  
COMMITTEE GUIDE  
p81

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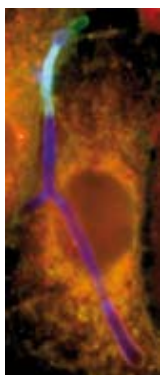
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# ENGINEERING NEW WEAPONS IN THE WAR AGAINST FUNGAL INFECTIONS



The FINSysB team meets at the Institut Pasteur in Paris, hosted by Professor Christophe d'Enfert (bottom, left)



Filamentous Candida cells attack human cells (prepared in Professor Bernhard Hube's laboratory in Jena, Germany)

Europeans may not realise it, but we are waging war against fungal infections. Nearly everyone carries *Candida*, but our immune defences hold it at bay. However, *Candida* often causes mouth and genital infections (thrush) in otherwise healthy people, and potentially fatal infections in vulnerable intensive care patients. Fungal infections are harder to detect and more difficult to treat than bacterial infections. This is partly because standard antibiotics don't work on fungi. Specific antifungal drugs must be used to fight these infections.

The European Marie Curie Training Network, FINSysB, is waging war on fungal infections. The Network is defining how *Candida* battles with its human host, and aims in the longer term to translate this knowledge into medically useful weapons to fight fungal infections. FINSysB is also training a new generation of young scientists to lead the battle against fungal disease in the future.

The FINSysB research programme has four work packages. These start with the 'Fungal Armoury', which is dissecting the molecular weapons used by *Candida* to attack us. Next are 'Defensive Shields' where FINSysB is studying how our immunological defences recognise and kill the invading fungus. Skirmishes between our defences and the attacking fungus are played out on 'Key Battlefields'. FINSysB is examining these trenches with a view to outflanking the fungus. The main objective is to 'Defeat the Enemy', and FINSysB is screening for potential targets that could lead to novel vaccines, better diagnostic tests and effective antifungal drugs. These weapons will help us win the war against fungal infections.

FINSysB needs a broad range of skills to meet these ambitious objectives. Professor Al Brown, University of Aberdeen, leads a team of twelve group leaders from the UK, France, Germany, the Netherlands, Italy, and Israel. Each brings unique expertise in experimental biology, computational science or translational medicine to FINSysB. Professor Brown said: "I feel privileged to work with this superb team. With the European Commission's support, we have created a vibrant network and a supportive research environment in which team members can enjoy our collective expertise, nurture their novel ideas, and flourish. Our talented FINSysB researchers are blossoming as they enjoy an interdisciplinary training that includes proteomics, genomics, systems biology and translational research. This is placing them in an excellent position career-wise. They will be snapped up by employers, but not before they have contributed to our long term aim of winning the war against *Candida*!"



Iryna Bohovych, Iuliana Ene and Abhishek Saxena, FINSysB researchers based at the University of Aberdeen, discuss the latest data!