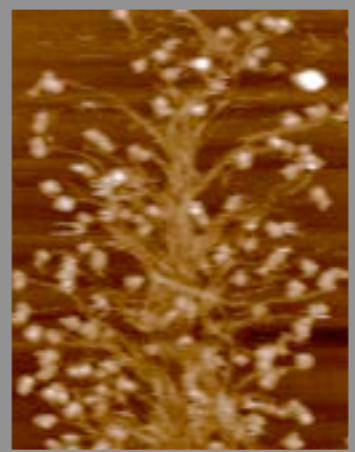
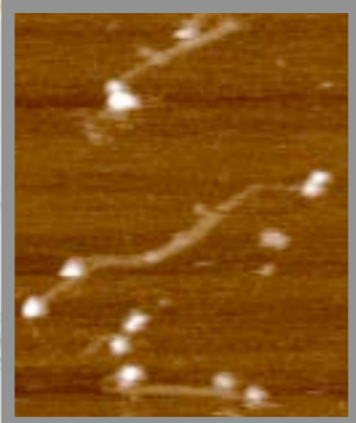
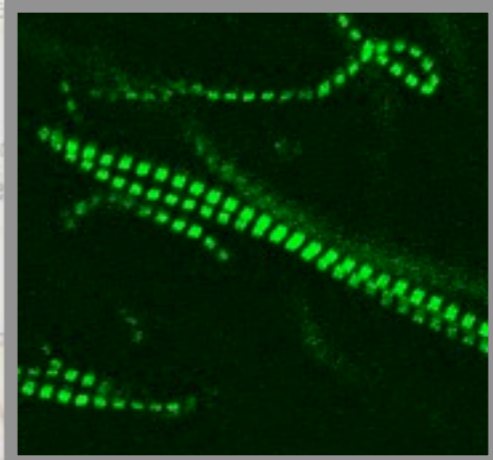
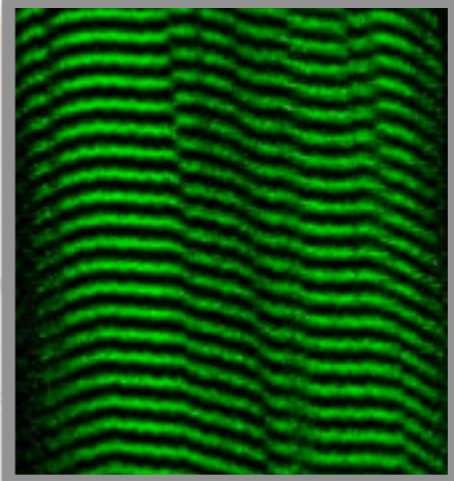
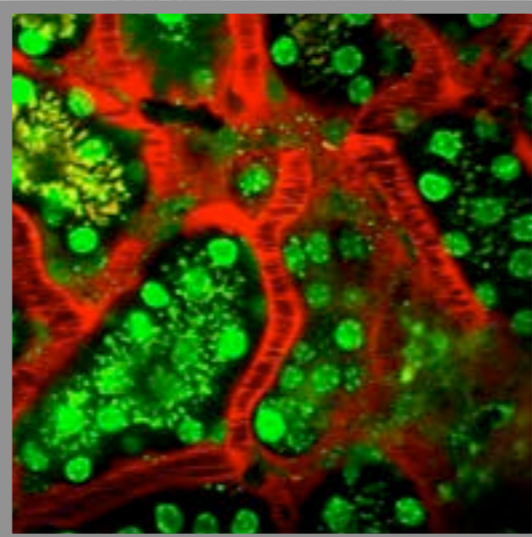
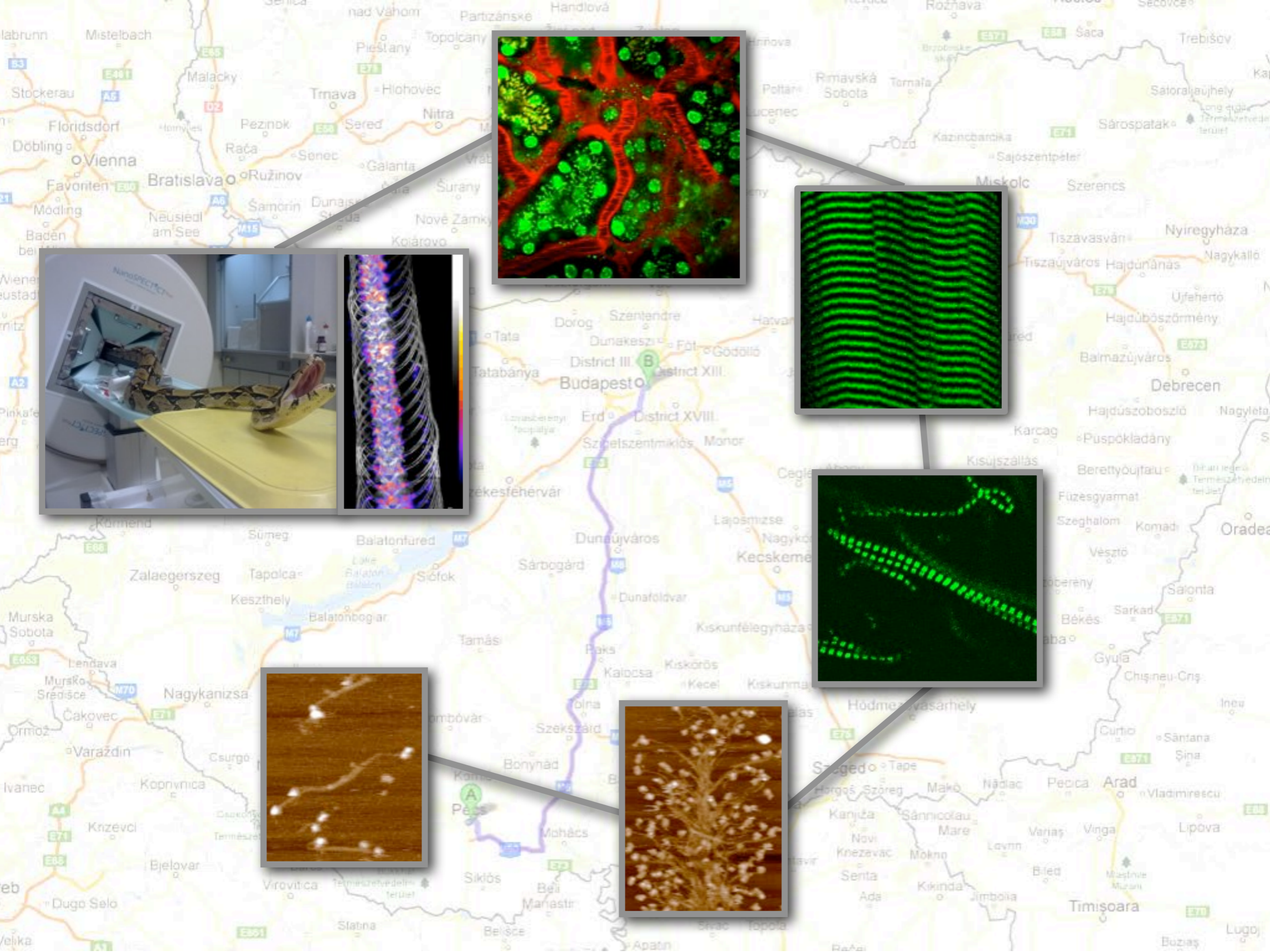


Egyedi molekuláktól az organizmusig - Pécstől a Semmelweis Egyetemig

Kellermayer Miklós





“Keressétek mindenekelőtt a szellem javait, a többit vagy megkapjátok, vagy nem érzitek hiányát.”

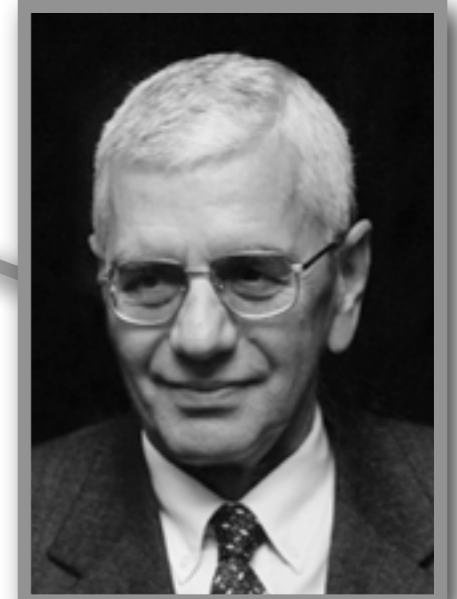
Francis Bacon



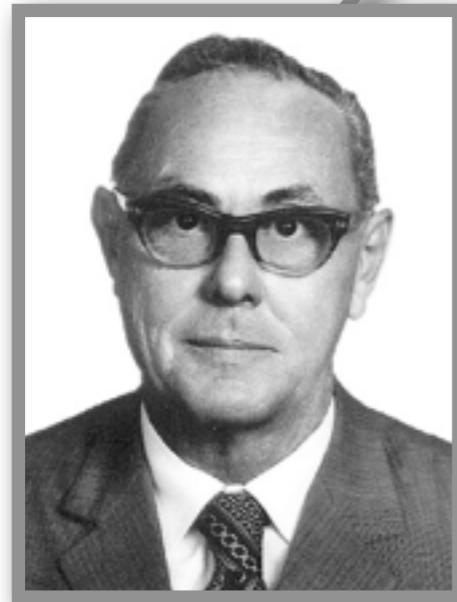
1982-1988



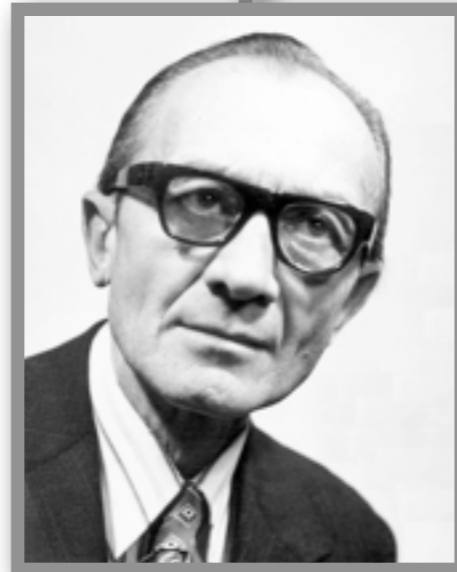
Romhányi György



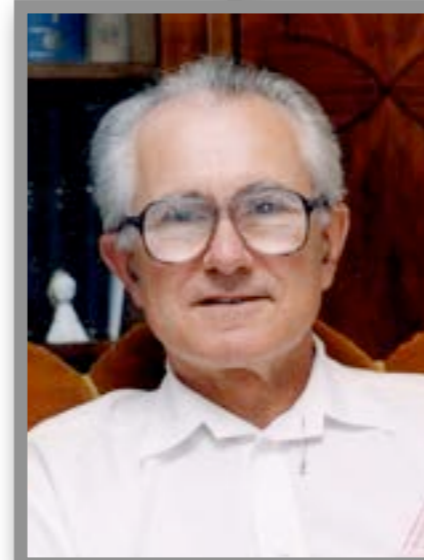
Méhes Károly



Flerkó Béla



Grastyán Endre



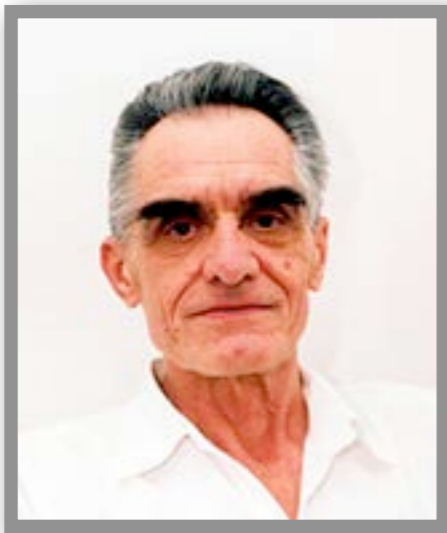
Czopf József



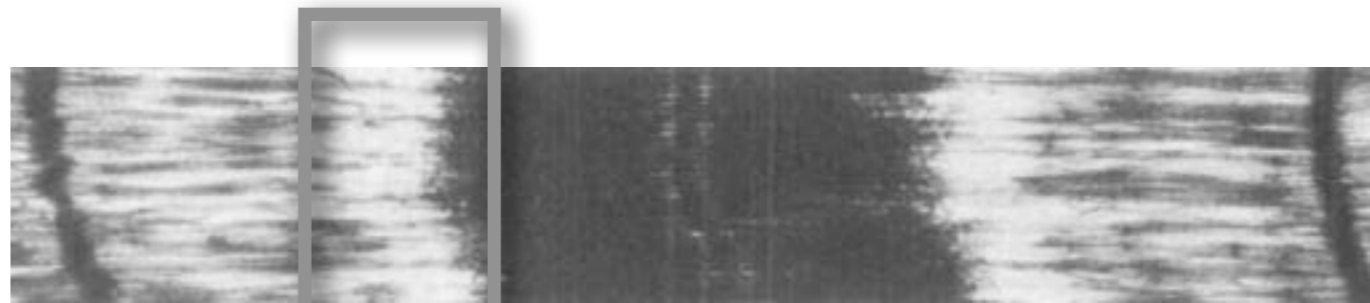
Nagy Ibolya

Tudományos Diákkör (1983-1988)

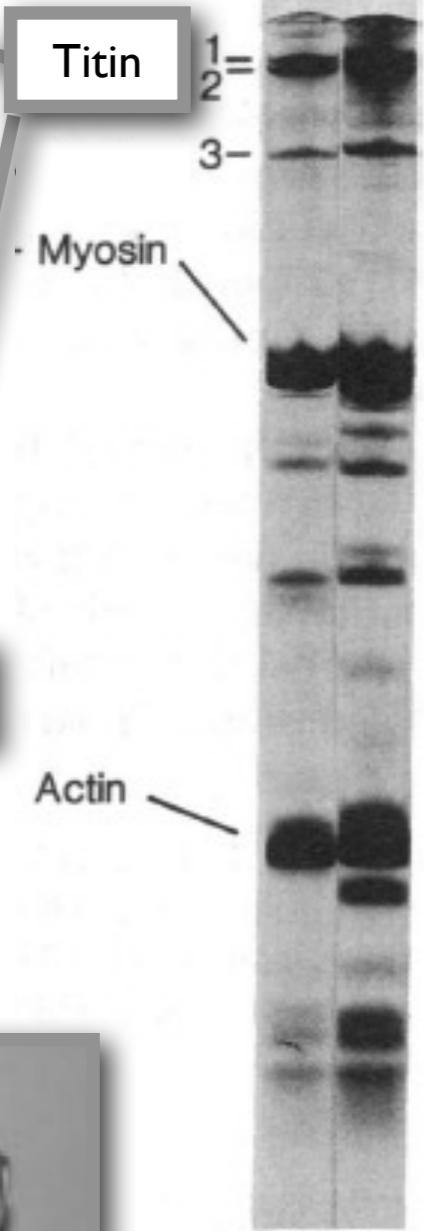
Belágyi József



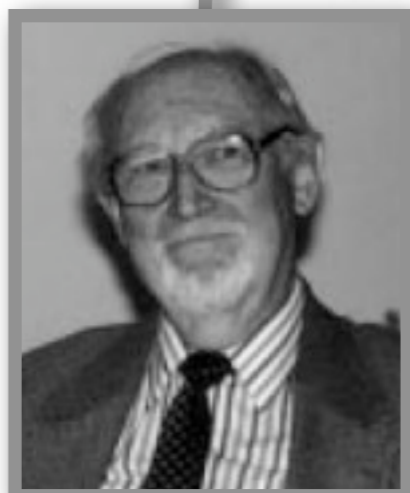
Trombitás Károly



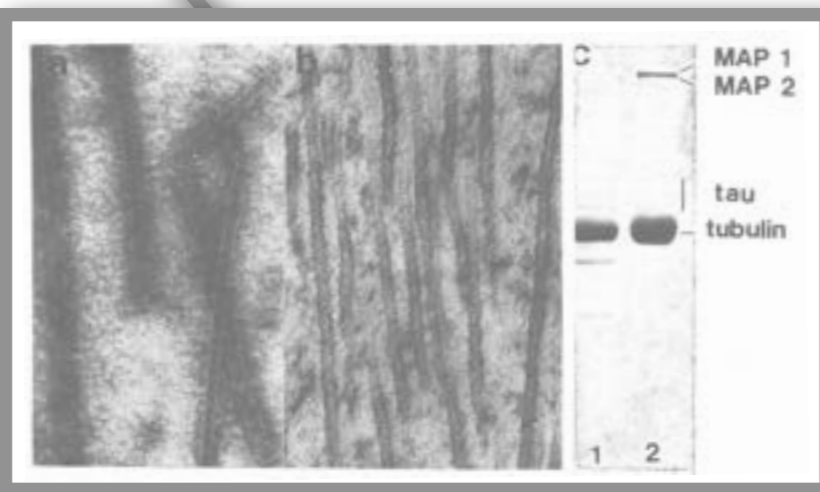
connecting filaments



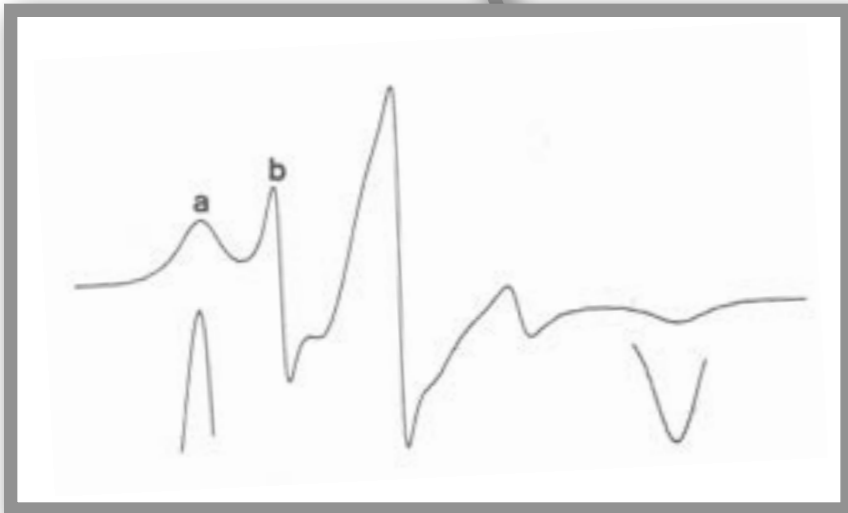
fibrillin



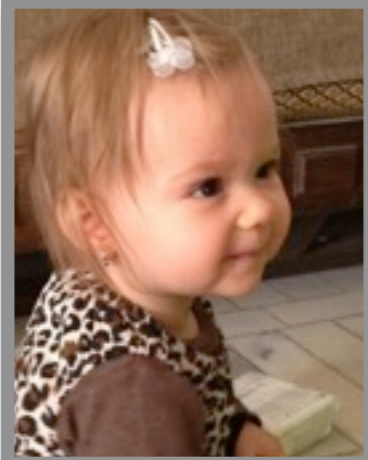
Guba Ferenc



negatíván festett mikrotubulusok



spinjelölt mikrotubuláris fehérje EPR spektruma



Írisz 2012



Viki

Zoltán 1985

Bernát 1986



Szántó Gyöngyi
1985



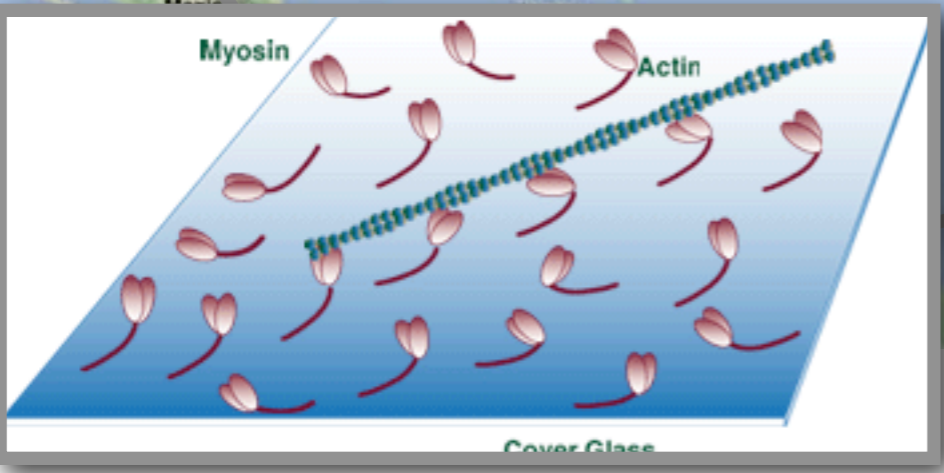
Anna 1999

Dalma 1992

Blanka 1987

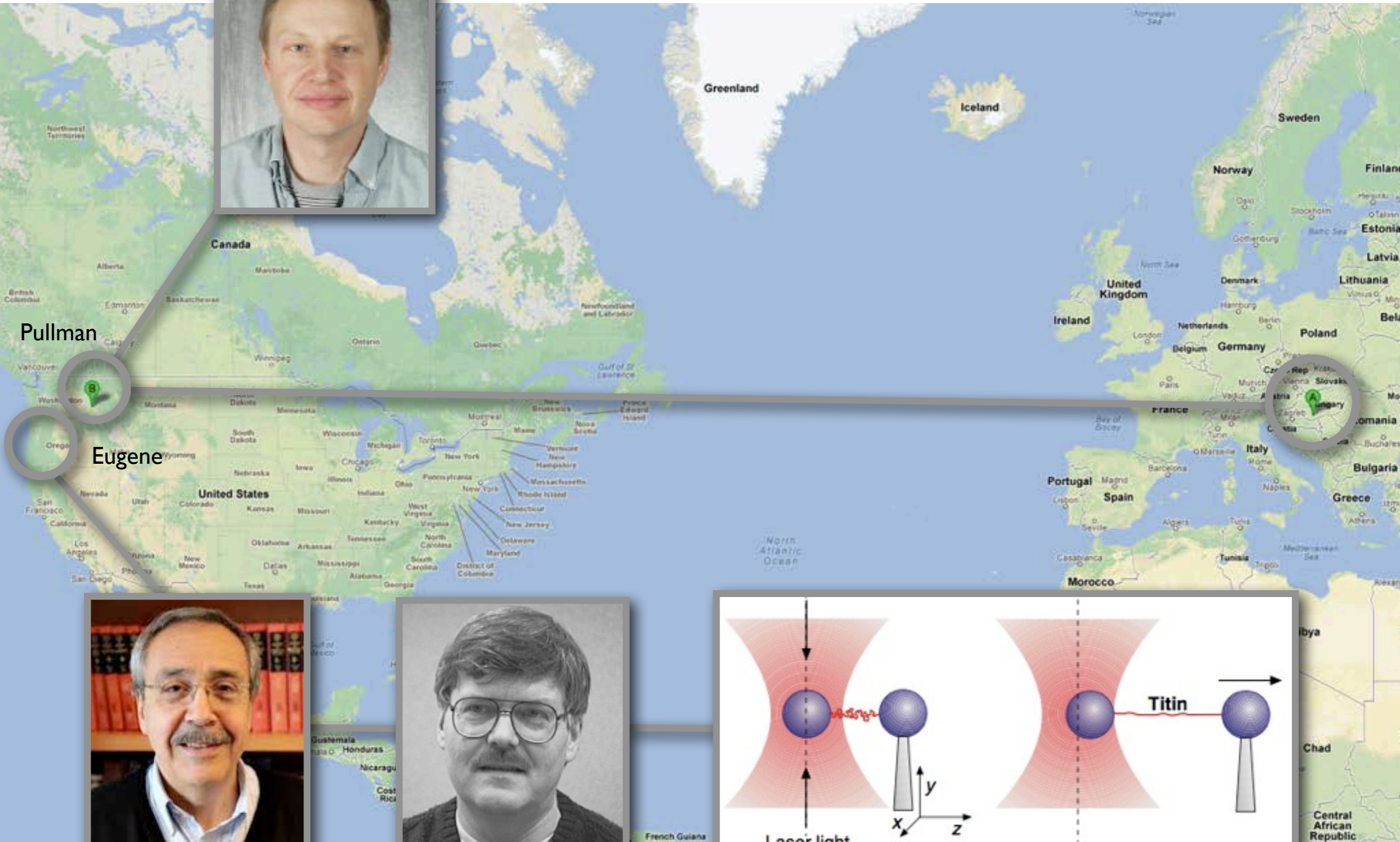
Gerald H. Pollack

1989-1993



Henk L. Granzier

1995-1997



Pullman

Eugene

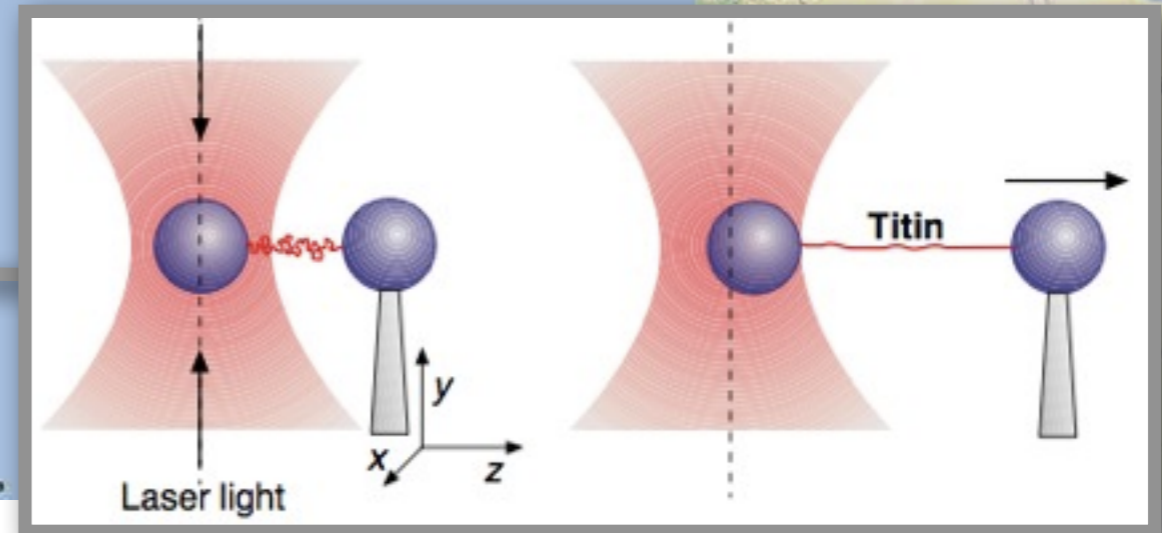
Hungary



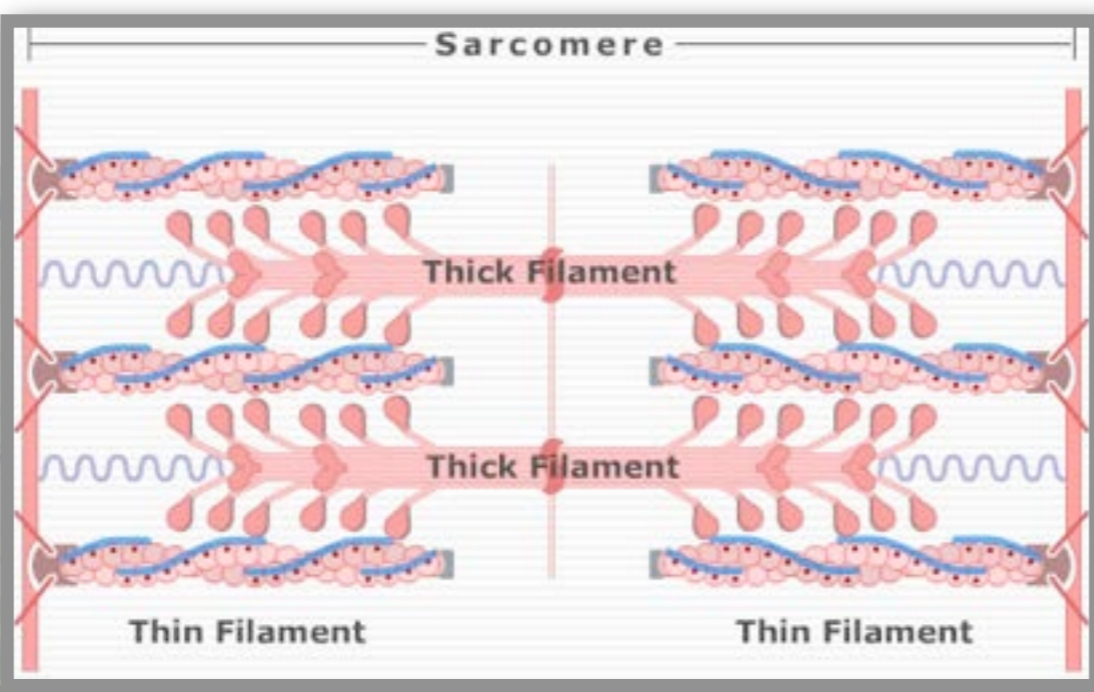
Carlos J. Bustamante



Steven B. Smith



Science 276, 1112-1116, 1997.



John Trinick



Elasticity and unfolding of single molecules of the giant muscle protein titin

L. Tskhovrebova[†], J. Trinick^{*}, J. A. Sleep[‡] & R. M. Simmons[‡]

Stretching Single Protein Molecules: Titin Is a Weird Spring

Harold P. Erickson

**Muscle structure
Molecular bungees**

Thomas C. S. Keller III

Kuan Wang Michael Sheetz

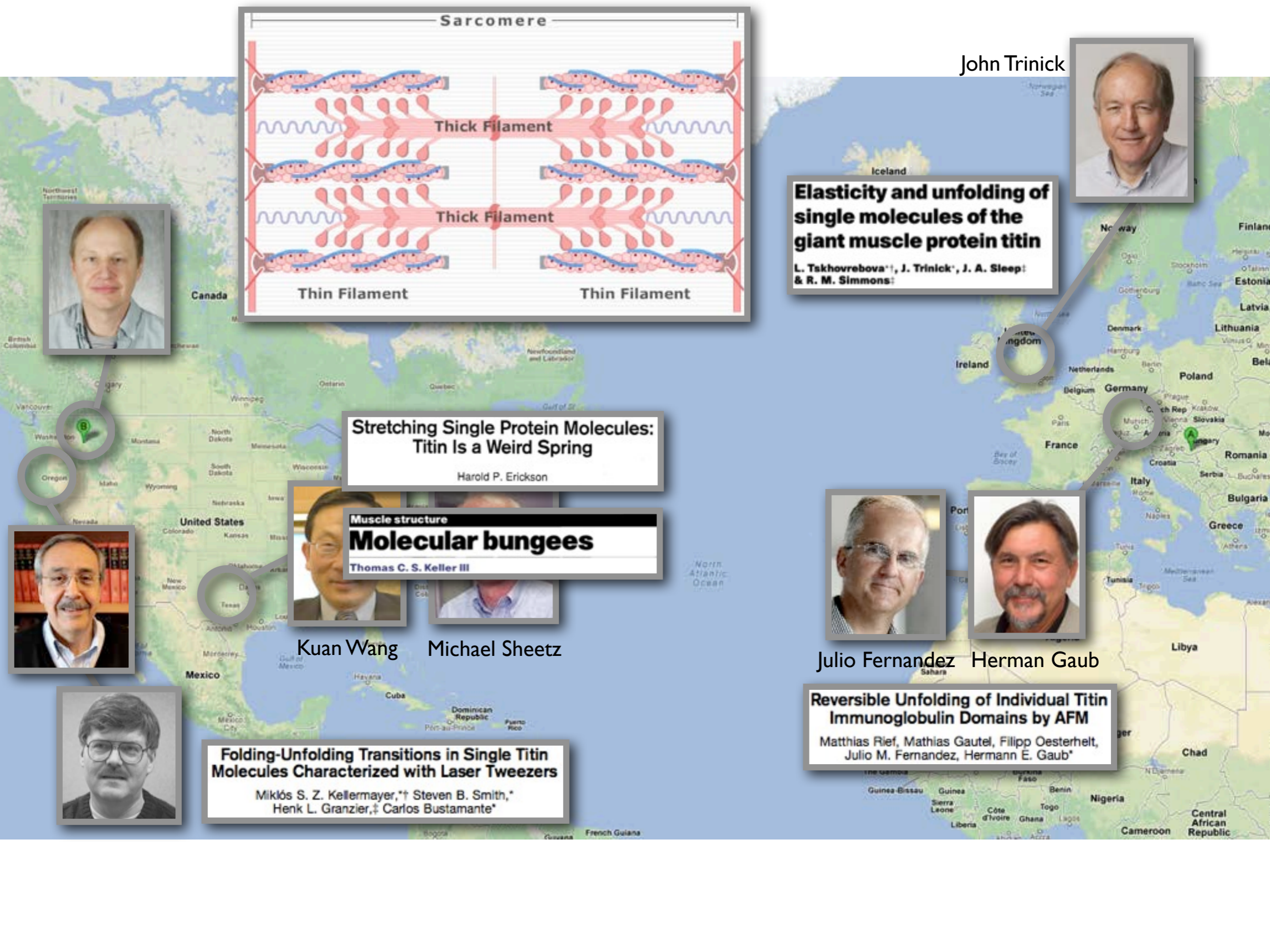
Folding-Unfolding Transitions in Single Titin Molecules Characterized with Laser Tweezers

Miklós S. Z. Kellermayer,[†] Steven B. Smith,^{*} Henk L. Granzier,[‡] Carlos Bustamante^{*}

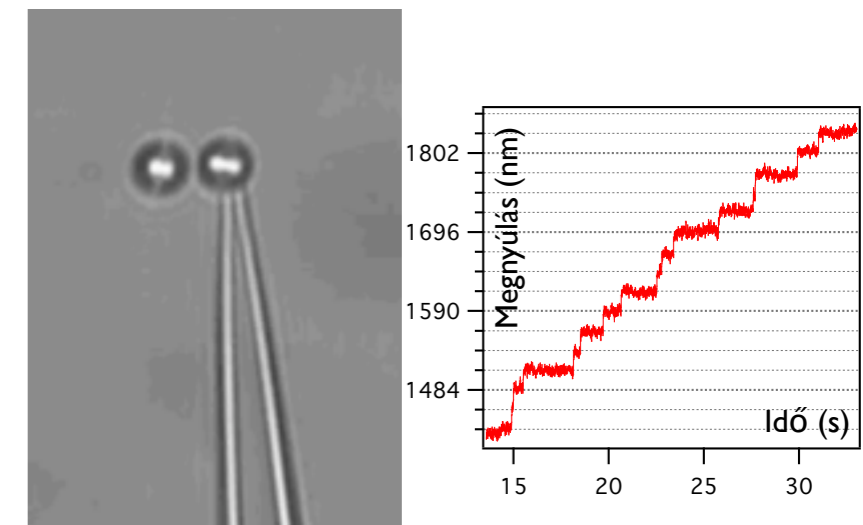
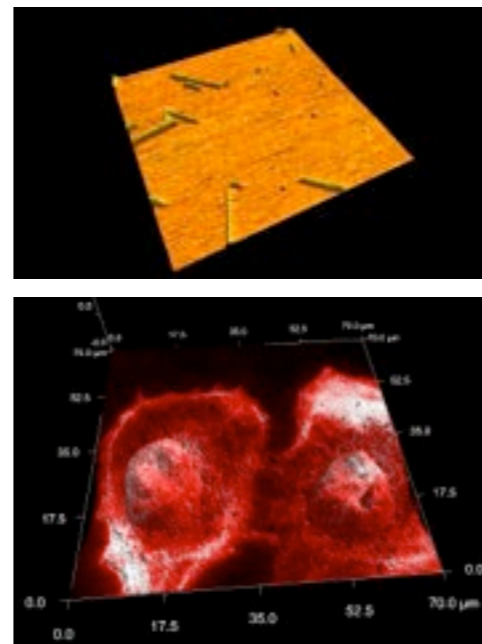
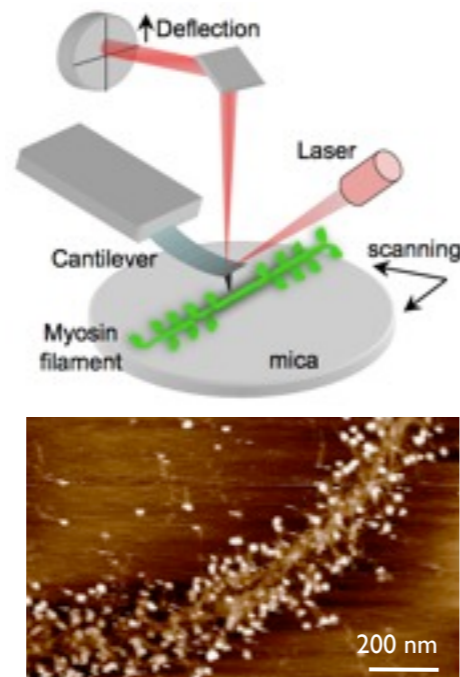
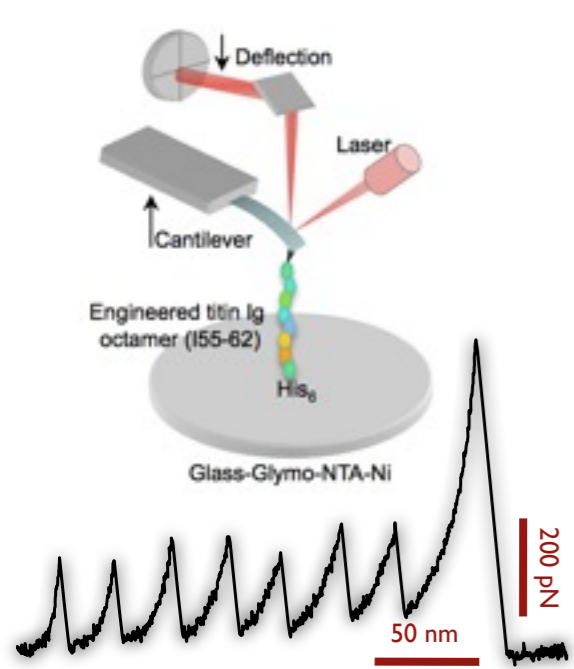
Reversible Unfolding of Individual Titin Immunoglobulin Domains by AFM

Matthias Rief, Mathias Gautel, Filipp Oesterhelt, Julio M. Fernandez, Hermann E. Gaub^{*}

Julio Fernandez Herman Gaub



Nanobiotechnológia és egymolekula biofizika Pécs 2000-2008





Fidy Judit
2007



Puskin utca 1948



EOK 2008

Semmelweis Egyetem Biofizikai és Sugárbiológiai Intézet

Koczkás Gyula
(1948–1950)



Tarján Imre
(1950–1982)



Rontó Györgyi
(1982-1999)



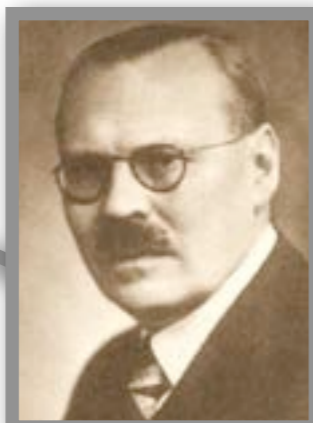
Fidy Judit
(1999-2008)



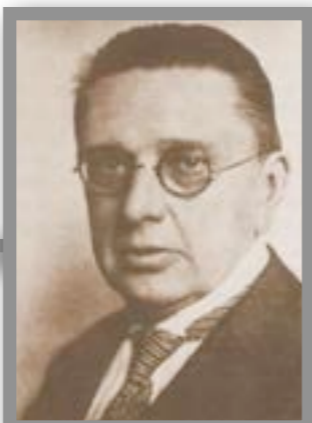
Szent-Györgyi Albert



Rybár István



Tangl Károly



Eötvös Loránd

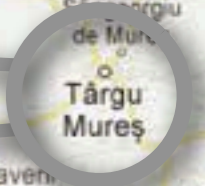
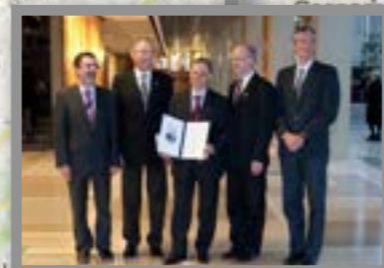
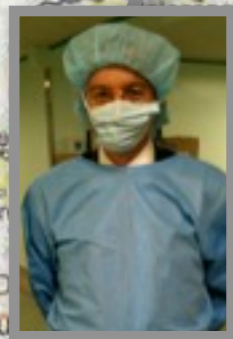


2010

2007-2009-2012



$$TUD_{irel} = \frac{TUD_i}{\sum_{i=1}^n TUD_i}$$



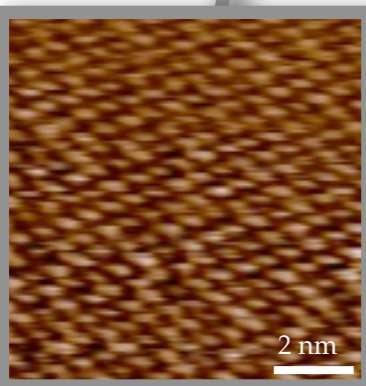
Atomoktól az ...



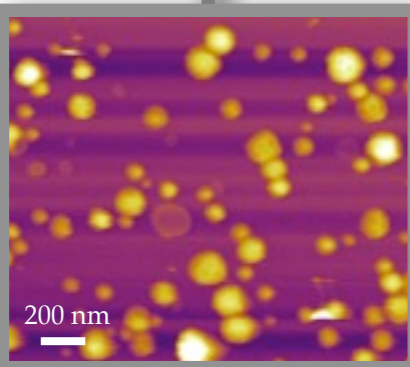
...organizmusig



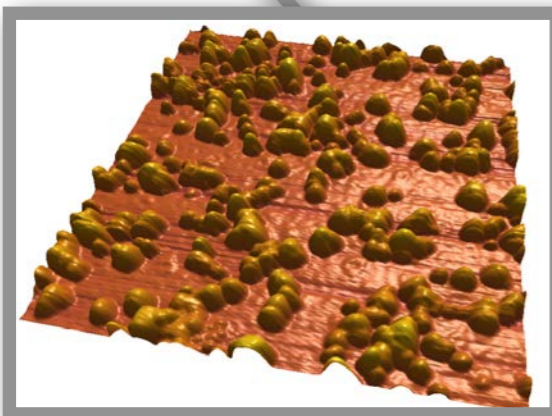
AFM



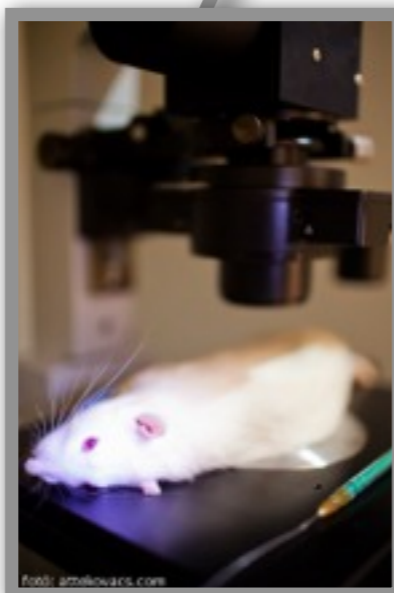
atomok csillám felületen



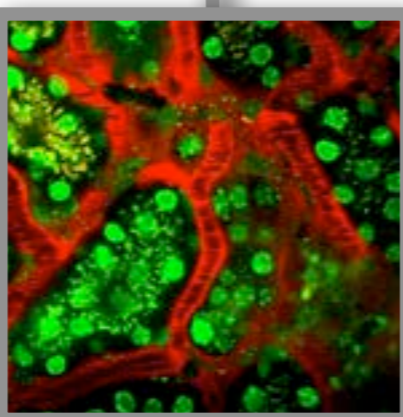
liposzómák



Berlini-kék multimodáli kontrasztú nanopartikulumok



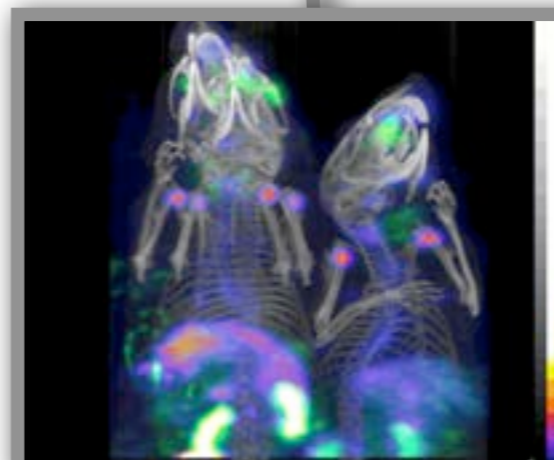
multi-foton mikroszkóp



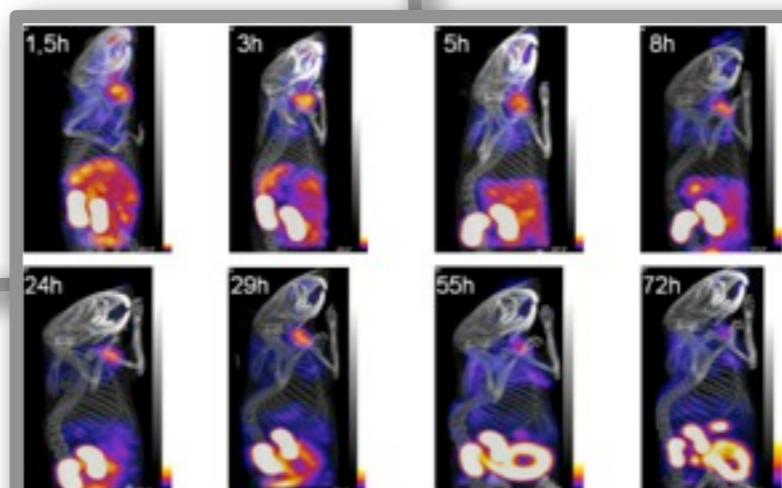
vesekéreg



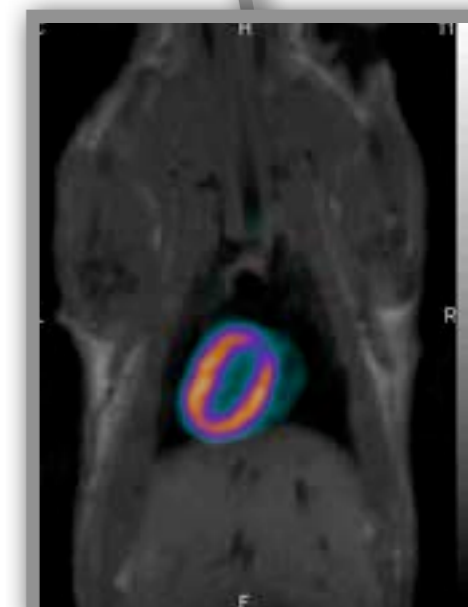
nanoSPECT/CT



^{99m}Tc-DTPA: BBB - **kék/vörös**
²⁰¹Tl-DDC: perfúzió - **zöld**



nanoPET/MRI



EKG-kapozott ¹⁸F-DG PET/MRI