

Nutrition, Physical activity and Metabolism

Matthijs Hesselink (coord MBS1301)

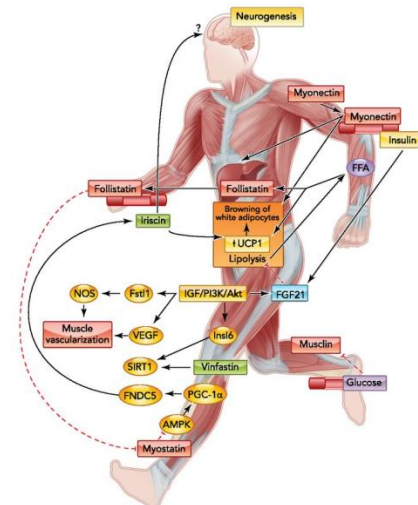
Prannay Sastry (student NPAM)



Topics to be studied



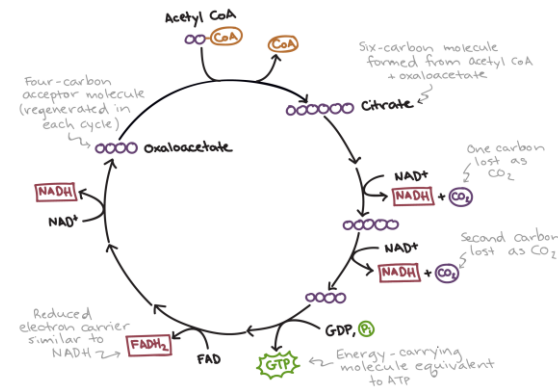
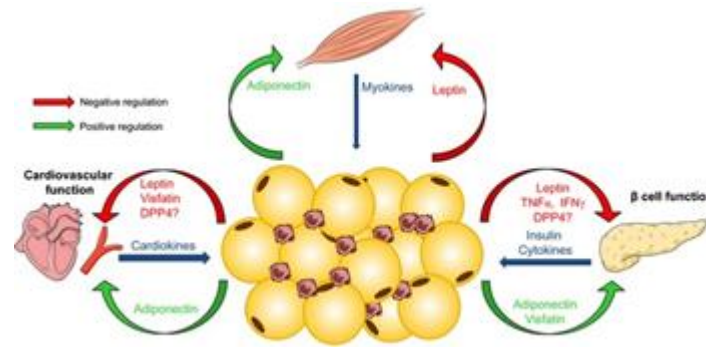
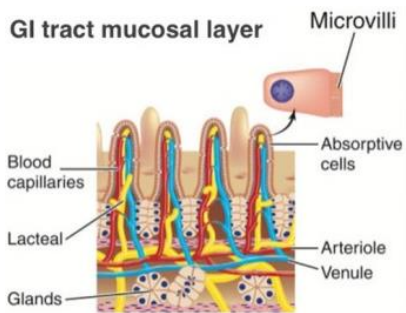
- integrative and interorgan physiology of key metabolic organs
- biochemical and cellular basis for diet- and activity-induced alterations in health
- nutritional and exercise effects on non-communicable diseases
- non-exercise life-style interventions to promote energy turnover to alleviate metabolic stress



Course 1: Nutrition, physical activity and metabolism; fundamental aspects

You will be trained to get...

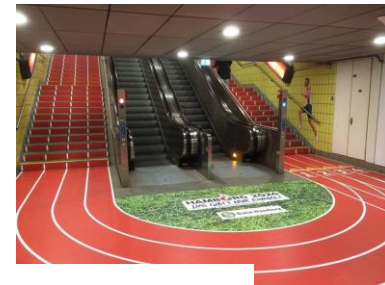
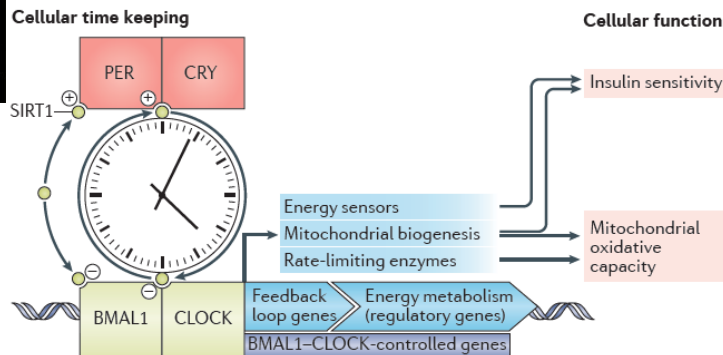
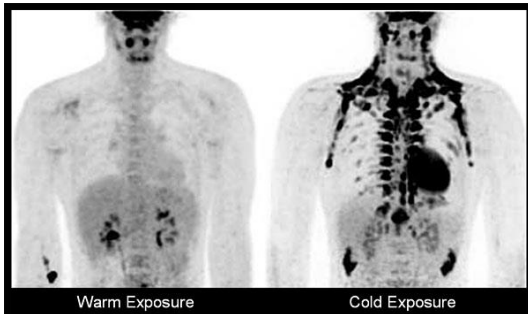
- Insight into the major systems of human nutritional- and exercise physiology and metabolism
- Understand intermediary metabolism, and how metabolites and small peptides affect metabolic control and inter-organ cross-talk
- Identify metabolic processes to revert poor macronutrient handling, malignant cell growth and immune cell activity



Course 2: Lifestyle interventions and metabolism; a translational perspective

You will be trained in:

- Strategies affecting intermediary metabolism to maintain or promote health
- (Sub)Cellular routes which facilitate these adaptive (interorgan) responses
- Taking conventional (nutritional and exercise based) strategies to promote metabolic health to the next level
- Identifying mechanisms responsible for inter-individual responsiveness



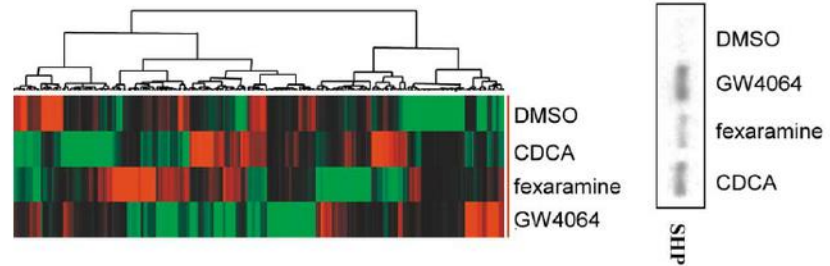
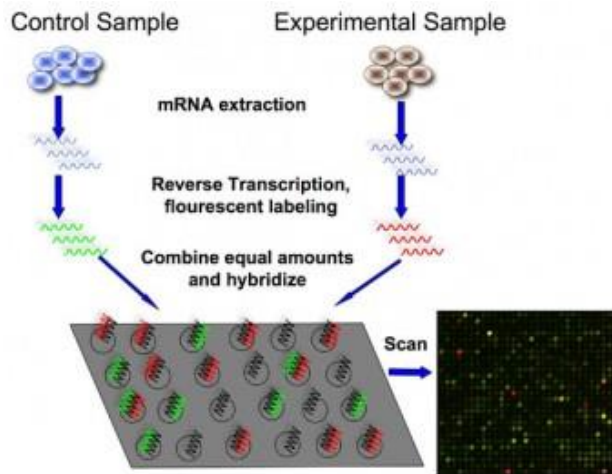
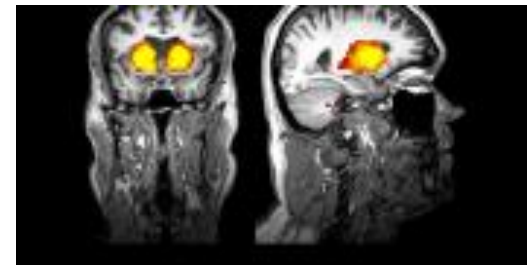
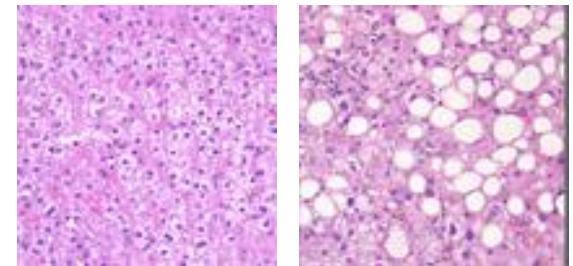
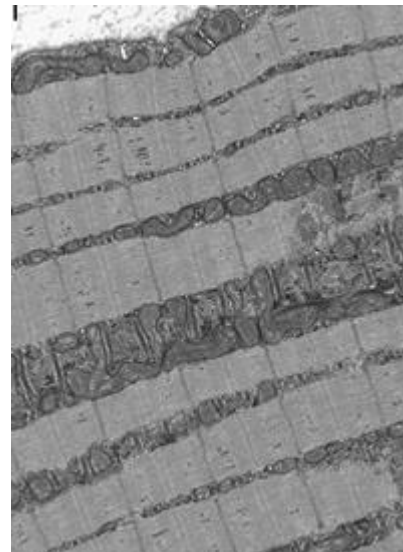
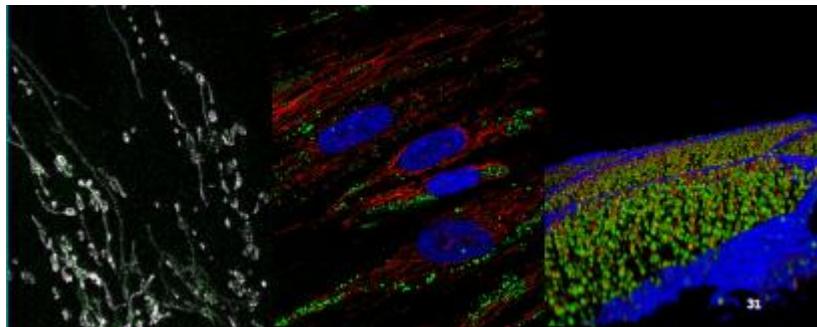
What makes Maastricht outstanding? Skills, tools techniques and infrastructure...



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Internships

- Longterm (32 weeks) research internship
- Internship at national or international renowned academic research centers/scientists
- Industrial internships optional (partners with proper in home R&D)
- Focus on translational research, with mechanistic focus
- Renowned scientific staff with wide international network
- Excellent in-home research facilities

Career perspective...

- Research positions in academia, industry, research institutes
- Development and evaluation of lifestyle interventions (community/municipality based)
- Clinical trial specialist
- Biotech SME
- Health related biometrics biometrics
- Science journalist
- Teaching
- ...

Report
MBS1301
 Nutrition, Physical Activity and Metabolism;
 Fundamental Aspects
 Academic year 2017-2018

	2017-2018
Quality of the organization	6.7
Learning effect of the course	7.4
Quality of the test	7.0
Total number of hours spent on stud per week (Me)	32.5

The course content was ...

	N	%
too easy	0.0%	0
easy	0.0%	0
just right	60.0%	9
difficult	40.0%	6
too difficult	0.0%	0
	100%	15

Provide an overall grade (1-10) for the quality of the course

N	M (1-10)	SD	+/-
15	7.3	0.9	

Would you recommend this course to fellow students?

	N	Because...
Yes	15	
No	0	

Report MBS1302

Lifestyle Interventions and Metabolism;
a Translational Perspective

Academic year 2017-2018

Provide an overall grade (1-10) for the course

N	M (1-10)	SD	+/-
15	6.7	1.5	

2017-2018

Quality of the organization	6.9
Learning effect of the course	6.9
Quality of the test	6.9
Total number of hours spent on stud per week (Me)	26.5

The course content was ...

	N	%
too easy	0	0.0%
easy	3	20.0%
just right	12	80.0%
difficult	0	0.0%
too difficult	0	0.0%
	15	100%

Academic Project

Please indicate to what extent you agree with the following statements

	N	M (1-5)	SD	+/-
During the academic project I could elaborate on the knowledge that I had obtained during the course	15	3.7	0.9	
The academic project was challenging for me	15	4.1	0.7	+
The academic project helped me to develop my academic research skills	15	4.4	0.5	+
The academic project helped me to develop my academic writing skills	15	4.3	0.5	+

Nutrition, Physical Activity and Metabolism

https://www.youtube.com/watch?v=8S-n9JLTXnA&index=5&list=PLUSQFygU_nHhCpyuf8CRqEV7PZrsCtZGG