

# Medical Engineering at FAU

Dipl.-Phys. Heike Leutheuser

Central Institute of Medical Engineering (ZiMT)





FRIEDRICH-ALEXANDER  
UNIVERSITÄT  
ERLANGEN-NÜRNBERG

40k students (4.9k internat. students)

265 degree programmes

579 professors

199.6m euros  
third-party funding

European Top 5 in Reuters Innovation  
Ranking

# Central Institute of Medical Engineering



## Medicine

65 Clinics, Chairs  
and Institutes



## Science

60 Chairs in 5  
Departments



## Engineering

58 Chairs in 5  
Departments

Central Institute of Medical Engineering



**Universitätsklinikum  
Erlangen**



**FAU** FRIEDRICH-ALEXANDER  
UNIVERSITÄT  
ERLANGEN-NÜRNBERG

# Medical Engineering Degree Programs



**B.Sc.**

3-year Bachelor  
introduced in  
2009/2010



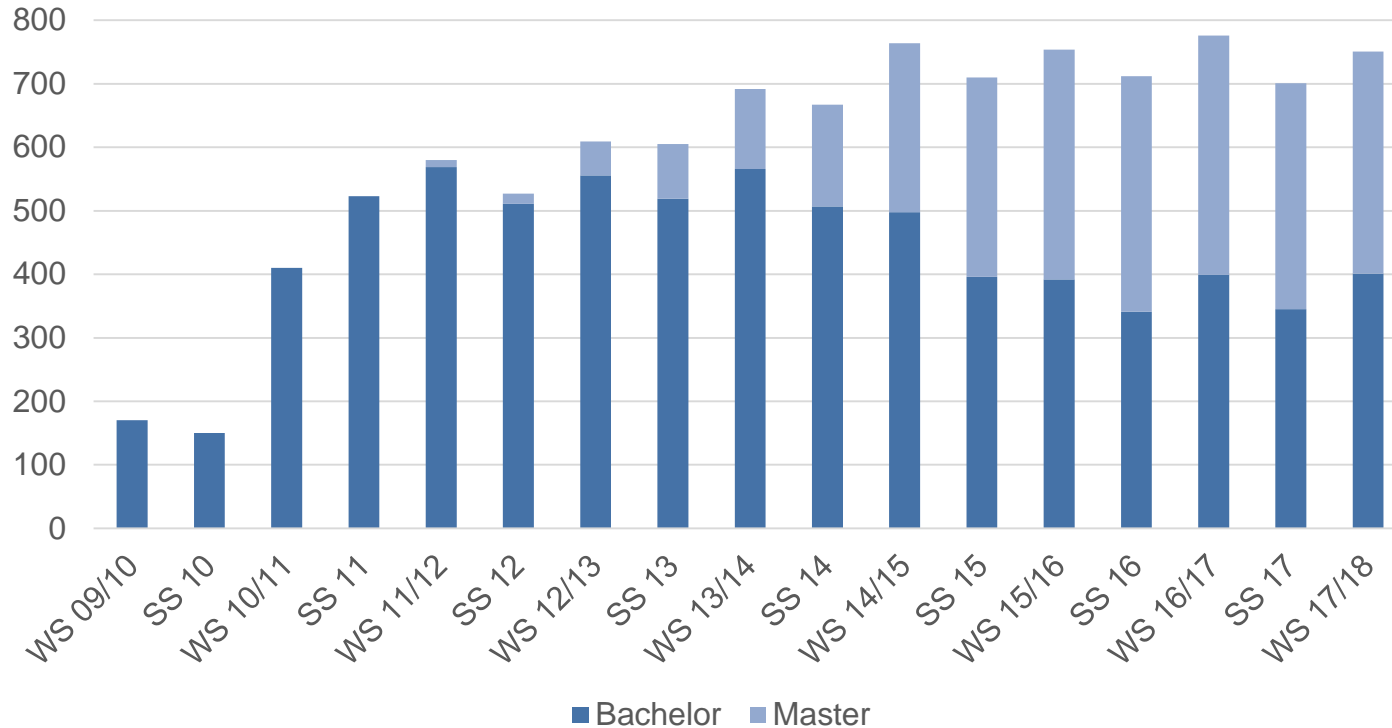
**M.Sc.**

2-year Master  
started in  
2011/2012

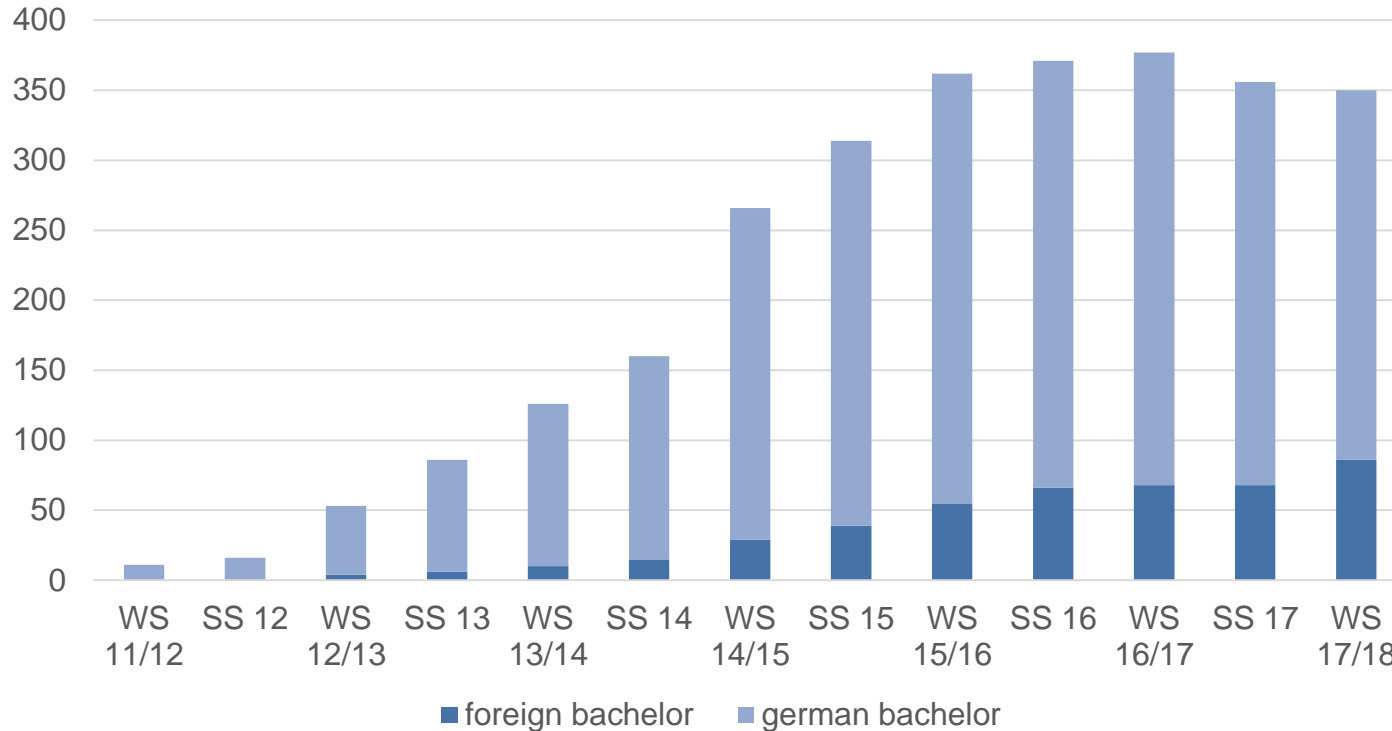


**Claudia Barnickel, M.A.**  
Study Advisor

# Enrollment in Medical Engineering



# Enrollment in Masters of Medical Engineering



# Outstanding lectures and seminars provided by ZiMT

- Colloquium Medical Engineering in Research and Industry
- Medical Device Regulation (MPR)
- Seminar Operating Room of the Future
- Seminar Medical Devices of the Future
- Advanced Medical Imaging (Clinical Navigation using Smart-Devices)





# Grant Consulting



## DAAD

Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



Bayerisches Staatsministerium für  
Wirtschaft, Energie und Technologie



**Dr. Lisa Walter, PhD**  
Grant Coordinator



## DFG



Bayerische  
Forschungs- und  
Innovationsagentur



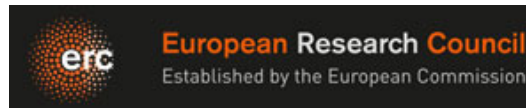
Bundesministerium  
für Bildung  
und Forschung



Bundesministerium  
für Wirtschaft  
und Technologie

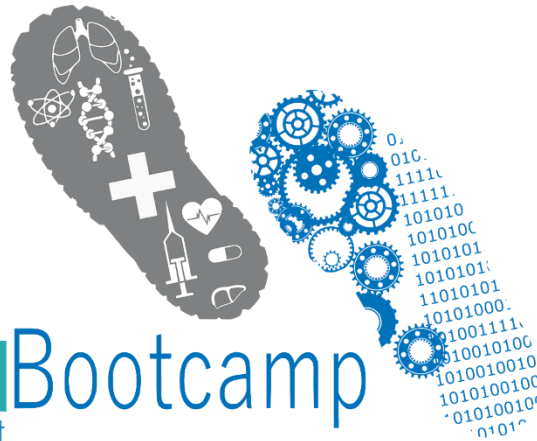
## d.hip

DIGITAL HEALTH  
INNOVATION PLATFORM





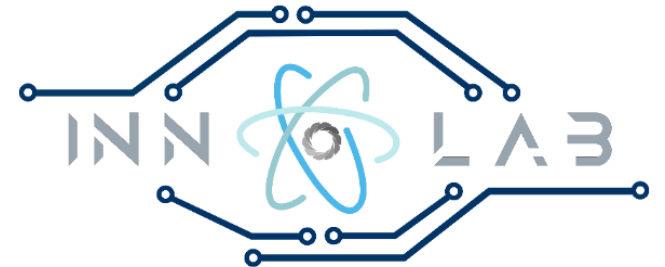
# Entrepreneurship



**MEDTECH** Bootcamp  
join the journey and reach the summit



**Philipp Dumbach, M.Sc.**  
Research Associate



FOR WEARABLE AND UBIQUITOUS COMPUTING



# EIT Health Bootcamp: MedTech – Vision



Input

Coaching

Spaces

# EIT Health Bootcamp: MedTech - Partners



**OÉ Gaillimh**  
 NUI Galway

**YES!** DELFT



**IESE**  
 Business School  
 University of Navarra




**FAU** FRIEDRICH-ALEXANDER  
 UNIVERSITÄT  
 ERLANGEN-NÜRNBERG

**ZiMT**  
 ZENTRALINSTITUT FÜR MEDIZINTECHNIK

**ZOLLHOF**  
 Tech Incubator

**JOSEPHS**  
 FOR MEDICAL INNOVATION

**MEDICAL VALLEY**  
 Europäische Metropolregion Nürnberg

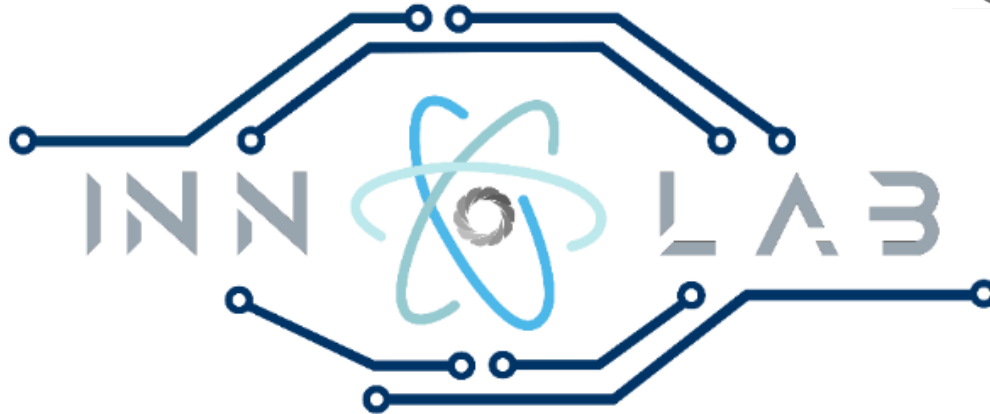
**d.hip**  
 DIGITAL HEALTH  
 INNOVATION PLATFORM

**unternehmertum**  
 Center for Innovation and Business Creation at TUM

# Innovation Lab for Wearable and Ubiquitous Computing



**MACHINE LEARNING  
& DATA ANALYTICS**



FOR WEARABLE AND UBIQUITOUS COMPUTING







# This is Medical Valley

# 500

More than 500 companies are active in medical technology

# 65

More than 65 hospitals, coupled with a strong outpatient sector, provide first-class healthcare.



# 850.000

Over 850.000 inpatients are treated in the Medical Valley each year

# 80

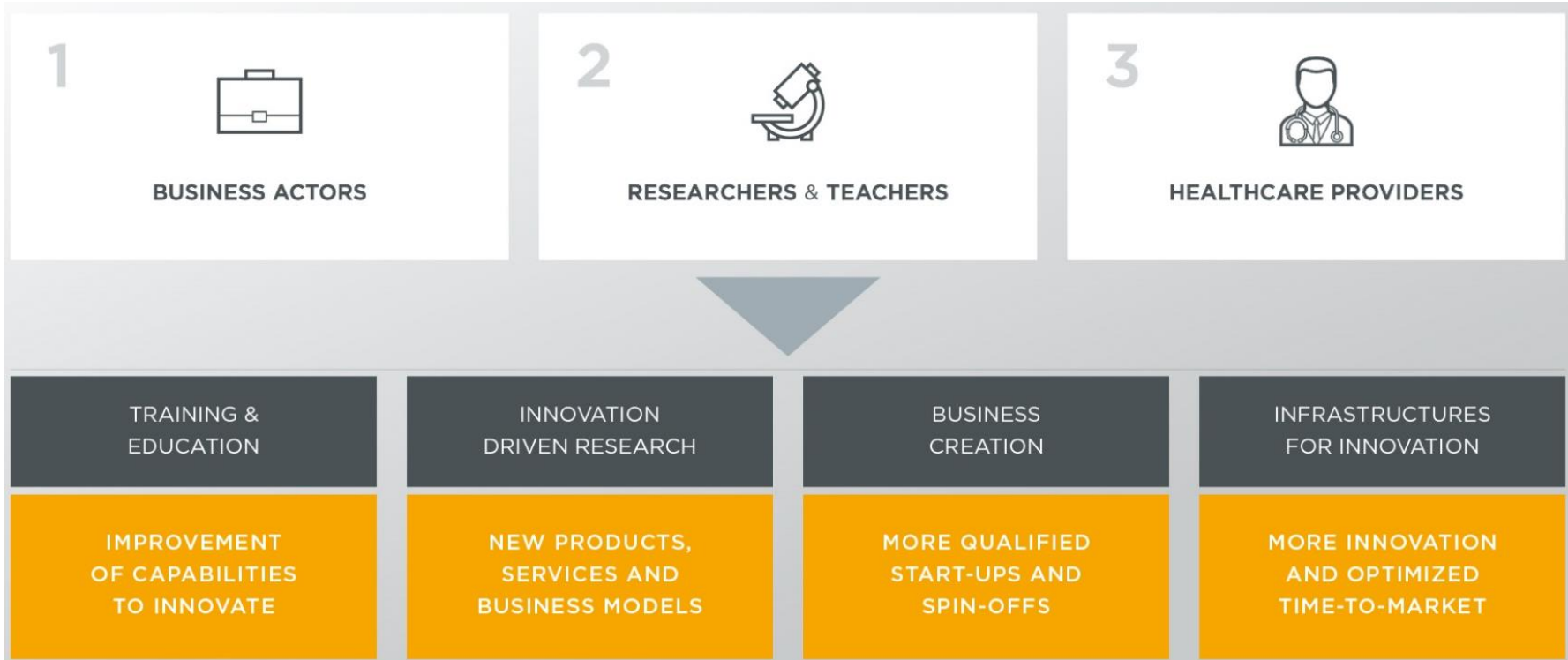
More than 80 institutes at universities and universities of applied sciences research and teach with a focus on medical technology

# 20

More than 20 non-university research institutions carry our research in the field of medical technology



# Activity Fields #Medical Valley



2003

MEDICAL VALLEY CENTER  
 ERLANGEN

2016

MEDICAL VALLEY CENTER  
 FORCHHEIM

2018

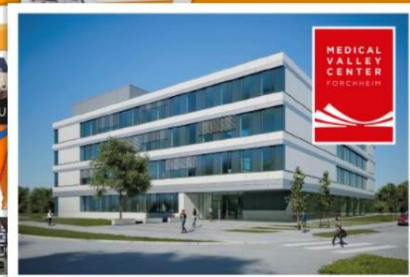
MEDICAL VALLEY CENTER  
 BAMBERG

TBD

MEDICAL VALLEY CENTER  
 AMBERG-WEIDEN



ERLANGEN



FORCHHEIM

BAMBERG  
 FOCUS AREA  
 DIGITAL HEALTH  
 MOBILE HEALTH LAB  
 HYGIENE LAB

AMBERG-WEIDEN  
 FOCUS AREA  
 RURAL HEALTH

de:hub

digital ecosystems  
 nürnberg erlangen. digital health

MEDICAL VALLEY  
 Europäische Metropolregion Nürnberg

# Digital Health Innovation Platform



AMBITION: „INNOVATION LEADER DIGITAL HEALTH“

PRECISION MEDICINE (P4-MEDICINE)  
PREDICTIVE, PREVENTIVE, PARTICIPATIVE, PERSONALISED



D.HIP  
PROJECTS



D.HIP  
LAB



DIGITAL HEALTH  
DATA CENTER

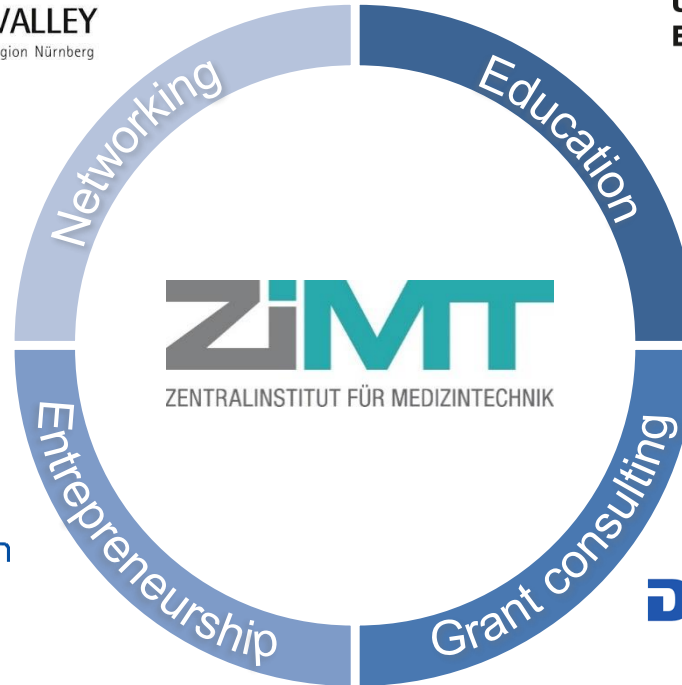


DIGITAL HEALTH  
CAMPUS





**Universitätsklinikum  
Erlangen**





**We are located in...**

**Henkestraße 127  
91052 Erlangen**

**... corner between  
Hartmannstraße  
and Henkestraße**

# We are looking for a new student assistant!

- Administrative tasks and preparation of seminars
- 10 h / week

## Requirements:

- Experience in MS Office, InDesign, Illustrator
- Skills to write official effective texts (eng & deu)
- Capacity of teamwork, reliance, individual initiative and sense of responsibility

Interested?

→ Have a look at our website:

*<https://www.zimt.fau.de/infocenter/ausschreibungen/>*



# Christmas Get-Together

**Save the date!**  
**18th Dec – 4.30 pm**

# Thank you for your attention!



[zimt-geschaeftsstelle@fau.de](mailto:zimt-geschaeftsstelle@fau.de)

[heike.leutheuser@fau.de](mailto:heike.leutheuser@fau.de)

