MEDICAL UNIVERSITY
OF VIENNA

“How to boost your career?”

Thomas Beyer, PhD, MBA – and – Ivo Rausch, PhD

Center for Medical Physics and Biomedical Engineering

Who are we?

MEDICAL UNIVERSITY OF VIENNA

Imagine, two imaging physicists.

Agenda

- Monday
  - Introduction and Motivation
- Tuesday
  - Your CV and Your letter of application
- Wednesday
  - Student survey 2019 (vs 2017-8): Of wishes and reality … + HYBRID
- Thursday
  - *Hospital visit*
- Friday
  - Update (CV, letter) and Q&A

This block is for you! Get engaged!

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WE WANT YOU!

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Curiculum vitae
& the publication list

Curiculum vitae

A CV is a short account of one's career and qualifications prepared typically by an applicant for a position.

- Your CV should be clear, concise, complete, and up-to-date with current employment and educational information.
- A good CV should ideally cover no more than two pages. Ensure the content is clear, structured, concise and relevant. Using bullet points rather than full sentences can help minimize word usage.

Lebenslauf

Persönliche Daten

Name:	**Dipl.-Ing. Ivo Florian Rausch**
geboren am:	26. September 1984 in Feldkirch, Österreich
Anschrift:	Obere Donaustrasse 31/8, 1020 Wien, Österreich Tel.: +43 (0) 650 / 1601166 e-mail: ivo.rausch@meduniwien.ac.at

Studium / Schule

10/2014 – aktuell	Universitätslehrgang medizinische Physik an der Medizinischen Universität Wien, Wien, Österreich
03/2014 – aktuell	PhD Studium medizinische Physik an der Medizinischen Universität Wien, Wien, Österreich
10/2004 – 12/2011	Studium der Technischen Physik an der Technischen Universität Wien mit Schwerpunkt auf Nuklear und Medizinische Physik Diplomarbeit (in englischer Sprache): *Investigation of the Characteristics of Reconstruction Algorithms in Positron Emission Tomography* Verleihung des akademischen Grades Diplom-Ingenieur (DI)
08/2010 – 01/2011	Auslandsstudium an der Uppsala Universitet, Uppsala, Schweden
06/2004	Matura am Bundesrealgymnasium Bludenz, Bludenz, Österreich

Arbeitserfahrung

03/2014 – aktuell	wiss. Mitarbeiter - PhD Student bei Zentrum für medizinische Physik und biomedizinische Technik, Medizinische Universität, Wien, Österreich
10/2013 – 02/2014	wiss. Mitarbeiter bei Klin. Abteilung für Nuklearmedizin, Medizinische Universität, Wien, Österreich
05/2005 – 06/2013	Technischer Leiter des internationalen Theater Festivals Luaga&Losna, Nenzing/Feldkirch, Österreich
01/1999 – 09/2003& 11/2012 – 06/2013	Techniker bei Theater der Figur, Nenzing, Österreich

Lebenslauf I.F. Rausch, Seite 1 von 3

The CV is the most important document in your application

CV structure

- Personal details and contact information
- Education and qualifications
- Work experience/ employment history
- Skills / Special Qualifications
- Languages
- Other details
  - Grants and Awards
  - Memberships
  - Teaching experience incl. mentoring
  - Hobbies…

Use a simple and concise structure and formatting

Personal details and contact info

Name, date/place of birth, address, phone number, email…

- Have a look at the application process description if e.g. a photo, gender, age… is **required** or **not wanted** (special attention in USA!)

Curriculum vitae

Name:	Dipl.-Ing. Ivo Florian Rausch, PhD
Date / place of birth:	Sep-26 1984, Feldkirch, Austria
Address:	Vorgartenstrasse 76/31, 1200 Vienna, Austria
	phone office: +43 (0) 1 40400 55450
	phone private: +43 (0) 650 5601166
	e-mail: ivo.rausch@meduniwien.ac.at
OCRID:	https://orcid.org/0000-0002-4007-1669

Needs to include sufficient details to contact you!

Education and qualifications

In reverse order (PhD, MSc, BSc, specific courses e.g. MPE…). Include names of institutions and timelines! Include some additional details!

University / School	
10/2014 – 06/2018	University Course Medical Physics
	Medical University of Vienna, Vienna, Austria
03/2014 – 09/2017	PhD programme Medical Physics
	Medical University of Vienna, Vienna, Austria
10/2004 - 12/2011	Study of Technical Physics (Diplom-Ingenieur (DI), comparable to Master of Sciences) with emphasis on medical, nuclear and radiation physics
	University of Technology Vienna, Vienna, Austria
08/2010 - 01/2011	Mobility Semester
	Uppsala Universitet, Uppsala, Sweden
06/2004	Higher education entrance qualification
	Bundesrealgymnasium Bludenz, Bludenz, Austria

Work experience/employment history

In reverse order (latest job first). Include timelines and achievements / responsibilities.

- Include internships / summer jobs / … especially at an early stage of your carrier!

Relevant Work Experience	
03/2014 - today	Scientific Employee Centre of Medical Physics and Biomedical Engineering, Medical University of Vienna, Austria
10/2013 - 02/2014	Scientific Employee Division of Nuclear Medicine, Medical University of Vienna, Austria
05/2005 - 06/2013	Technical Director International Theater Festival Luaga&Losna, Nenzing/Feldkirch, Austria

Be aware that your former employer might be contacted!

Skills, Languages….

List specific skills e.g. computer skills, programming (language), driving licence…

References: Include contact information and reasoning (e.g. supervisor)

Alternative service

02/2012 - 10/2012	Emergency medical technician
	Samariterbund Feldkirch, Feldkirch, Austria

Special qualifications

03/2012	Emergency medical technician
since 10/2002	Driving licence (category B)
Computing:	Operation Systems: MacOS, Windows, Linux
	MS Office, LATEX
	Programming languages: C, C++, FORTRAN, Java, LabVIEW, SQL
	Special Programs: R - Project for Statistical Computing, Rover, Origin, madX

Languages

	German, native language
	English, fluent
	French, basic knowledge

Grants / funded projects

- Co-PI: EU-Project H2020 Innovative Training Network „HYBRID-764458"; 2017-2021, total funding € 3.8 M
- Co-PI: Siemens / MUW collaboration Project "18F-FDG- and 18F-NaF-PET imaging of Vulnerable Plaque"; 2016-2017, total funding € 60.000

Prizes / Awards

- Alavi-Mandel Award 2018, for the publication "PET/MRI for oncological brain imaging: A comparison of standard MR-based attenuation corrections with a novel, model-based approach for the Siemens mMR PET/MR system.", Society of Nuclear Medicine and Molecular Imaging (SNMMI)
- Award of Excellence 2017 for the best dissertations in 2017, Ministry of Science Austria
- Alavi-Mandel Award 2017, for the publication "Reproducibility of MRI Dixon-Based Attenuation Correction in Combined PET/MR with Applications for Lean Body Mass Estimation", Society of Nuclear Medicine and Molecular Imaging (SNMMI)
- Rudolf-Höfer-Preis 2017 for the best publication related to the application of radioactive isotopes in clinic and science in Austria, Gesellschaft der Ärzte in Wien
- Travel grant for the "1st Training School on PET/MR Engineering" 13. -16 May 2014, Technological Educational Institute Of Athens, Athens, Greece (COST Action: TD1007)
- "Vorarlberg Stipendium" 2010 for the Mobility Semester in Uppsala, Sweden.

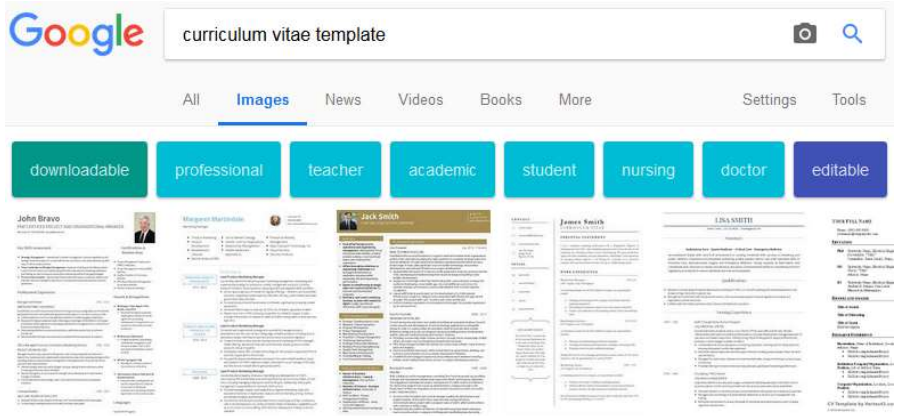
Include all relevant skills and activities

What not to do…

- Information which is not precise and to the point.
- Contact information that will raise flags:
  e.g. email addresses like badassguy@gmail.com or sexygirl69@hotmail.com
- Incorrect or misleading information:
  e.g. “Guest researcher at Harvard Medical school” -> Applicant was there **2 days!** No further consideration due to loose of trust
- Grammar / Spelling mistakes: make use of spell checker programs (e.g. in word)
- No personal information which is not relevant
  e.g. your religion, sexual orientation, body mass index…
- Strange hobbies …

Examples:

Google offers a multitude of templates



Specific CV formats:

e.g. EUROPASS CV

Make use of existing templates

Publication list

A publication list is a summary of all publications (Books, Papers, Conference contribution…) of a scientist.

- Scientists performance is mainly rated according to pubs (Nr. of publications, impact factors, h-factor …)

Structure (in reverse order)

- Peer reviewed articles
- Conference contributions / published abstracts
- Books and other publications

Most important record of achievements in science

Publication list: important points

Information needs to be complete (all authors, journal name, publication date…)

Highlight your name in the author list (e.g. use bold font)

Attention: some funding agencies require specific formats for the publication list!

At an early stage:

- It the publication list is short, consider adding it to the CV
- List all conference contribution (e.g. **the IFMP students forum**)
- Your thesis is also a publication. Can be listed like a book
- Invited talks

A publication list needs to be complete and up to date

Publication list example

Publications - Ivo Florian Rausch

Publications (peer – review)

1. N Poetsch, A Woehrer, J Gesperger, J Furtner, AR Haug, D Wilhelm, G Widhalm, G Karanikas, M Weber, **I Rausch**, M Mitterhauser, W Wadsak, M Hacker, M Preusser, T Traub-Weidinger. Visual and semiquantitative 11C-methionine PET: an independent prognostic factor for survival of newly diagnosed and treatment-naïve gliomas. Neuro Oncol. 2018;20:411-419.
2. S Wampl, **I Rausch**, T Traub-Weidinger, T Beyer, M Gröschl and J Cal-González; Quantification accuracy of neuro-oncology PET data as a function of emission scan duration in PET/MR compared to PET/CT. Eur J Rad 2017;95:257-264
3. N Kostiukhina,D Georg, S Rollet, P Kuess, A Sipaj, P Andrzejewski, H Furtado, **I Rausch**, W Lechner, E Steiner, H Kertesz, B Knaeusl; Advanced Radiation DOSimetry phantom (ARDOS) - A versatile breathing phantom for 4D radiation therapy and medical imaging. Phys Med Biol. 2017;62:8136-8153

Conferences:

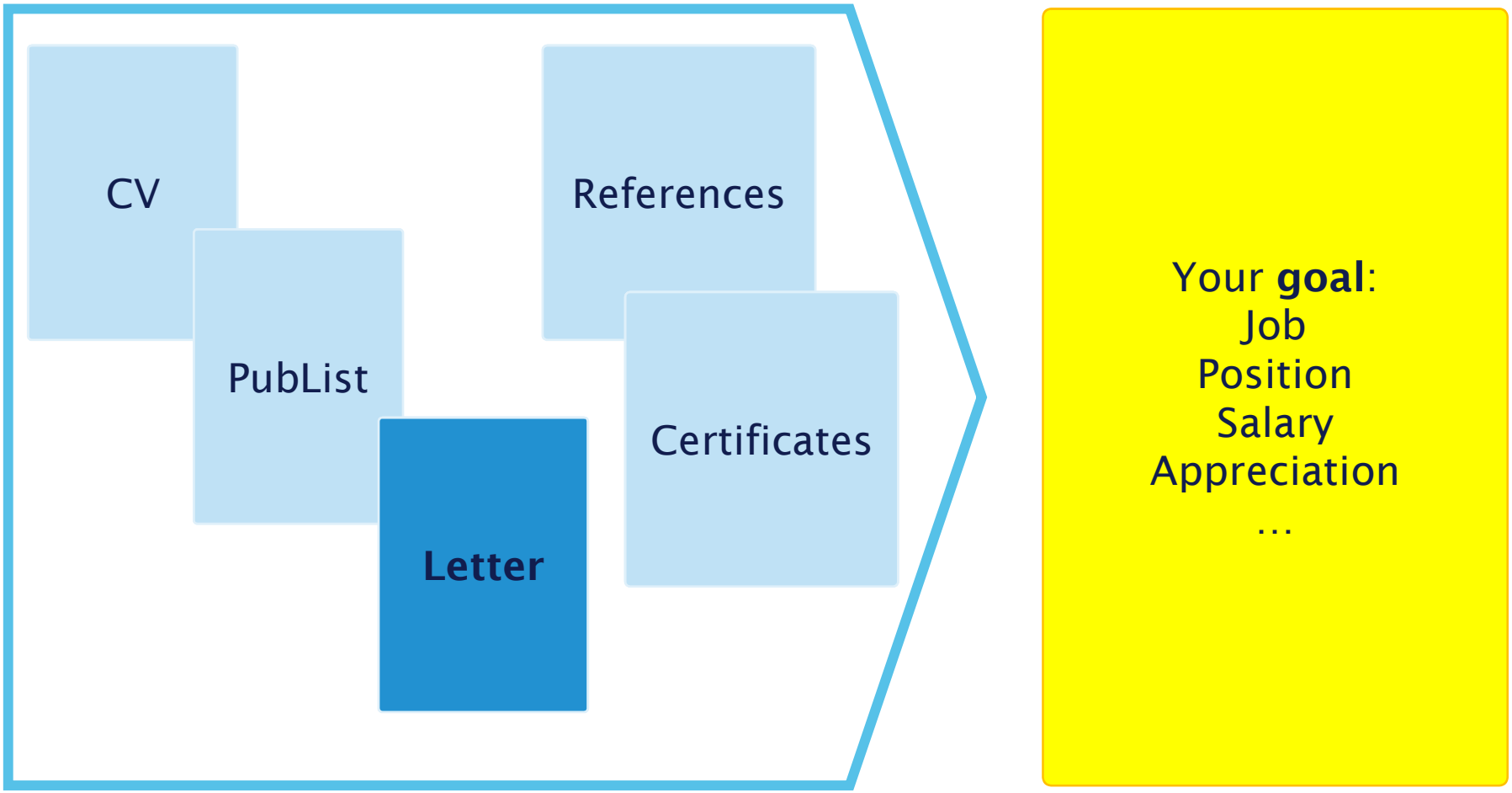
***Presentations*:**

- N Poetsch, A Woehrer, J Gesperger, AR Haug, D Wilhelm, G Karanikas, M Weber, **I Rausch**, M Mitterhauser, W Wadsak, M Hacker, T Traub-Weidinger; IDH1-R132H mutation and semiquantitative [11C]-methionine PET: Independent prognostic factors for characterization of newly diagnosed and treatment naive gliomas, Presented at: Annual Congress of the European Association of Nuclear Medicine, Oct 2017, Vienna, Austria
- L Shiyam Sundar, O Muzik, L Rischka, A Hahn, **I Rausch**, R Lanzenberger, M Hienert, EM Klebermass, T Traub-Weidinger, T Beyer; Calculation of image-derived input function for absolute quanti cation of clinical [18]FDG PET/MRI studies of the brain, Presented at: Annual Congress of the European Association of Nuclear Medicine, Oct 2017, Vienna, Austria
- **I Rausch**, J Cal-Gonzalez, D Beizke, A Haug, X Li, M Fenchel, T Beyer; Influence of ignoring bone attenuation in standard PET/MRI of carotid plaques, Presented at: Annual Congress of the European Association of Nuclear Medicine, Oct 2017, Vienna, Austria

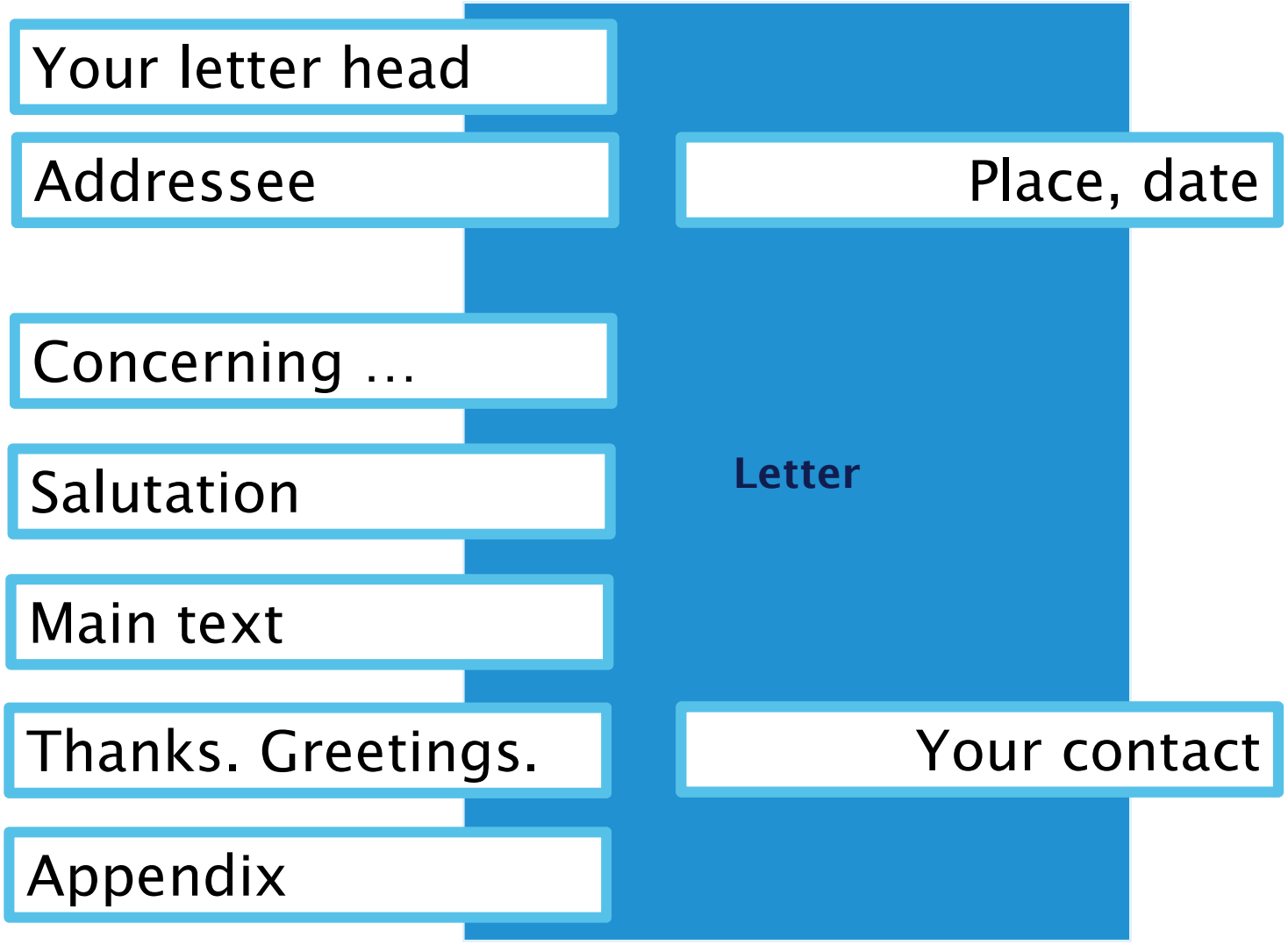
Book Chapters

1. **Ivo Rausch** and Thomas Beyer (2016), Physikalisch-technische Grundlagen. in Mohnike W., Hör G., Hertel A., Schelbert H. (Eds.); PET/CT Atlas, Berlin: Springer

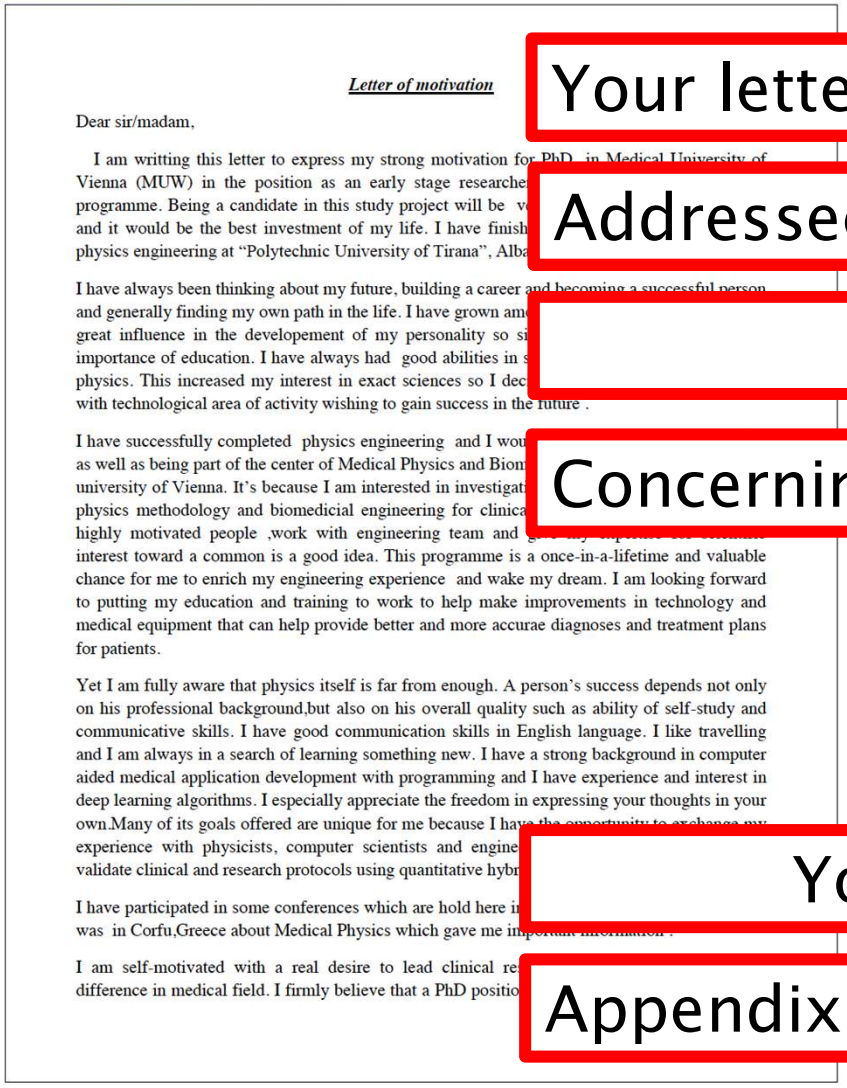
Application letter



Application letter



Application letter



Letter of motivation

Dear sir/madam,

I am writting this letter to express my strong motivation for PhD in Medical University of Vienna (MUW) in the position as an early stage researche programme. Being a candidate in this study project will be v and it would be the best investment of my life. I have finish physics engineering at "Polytechnic University of Tirana", Alba

I have always been thinking about my future, building a career and becoming a successful person and generally finding my own path in the life. I have grown am great influence in the developement of my personality so si importance of education. I have always had good abilities in s physics. This increased my interest in exact sciences so I dec with technological area of activity wishing to gain success in the future .

I have successfully completed physics engineering and I wou as well as being part of the center of Medical Physics and Biom university of Vienna. It's because I am interested in investigati physics methodology and biomedicial engineering for clinica highly motivated people ,work with engineering team and interest toward a common is a good idea. This programme is a once-in-a-lifetime and valuable chance for me to enrich my engineering experience and wake my dream. I am looking forward to putting my education and training to work to help make improvements in technology and medical equipment that can help provide better and more accurae diagnoses and treatment plans for patients.

Yet I am fully aware that physics itself is far from enough. A person's success depends not only on his professional background,but also on his overall quality such as ability of self-study and communicative skills. I have good communication skills in English language. I like travelling and I am always in a search of learning something new. I have a strong background in computer aided medical application development with programming and I have experience and interest in deep learning algorithms. I especially appreciate the freedom in expressing your thoughts in your own.Many of its goals offered are unique for me because I have the opportunity to exchange my experience with physicists, computer scientists and engine validate clinical and research protocols using quantitative hybr

I have participated in some conferences which are hold here i was in Corfu,Greece about Medical Physics which gave me

I am self-motivated with a real desire to lead clinical re difference in medical field. I firmly believe that a PhD positio

Your letter head

Addressee

Place, date

Concerning …

Your contact

Appendix

Dear Dr Defossez,

ology young graduate from University Claude Bernard Lyon express my interest in the position of Research Associate ur team. This position call was kindly shared through the gram colleagues.

of hands on work in laboratories of Massachussets Center, USA, INSERM and CIRI, France, I have acquired a ond to the needs of your project.

– ZBTB38 axis and Reactive Oxygen Species (ROS) attention as it addresses the question of how cells survive l metabolic stress, which is a critical question in the rapies. It opens a new pathway to shaping the tic gene expression regulation. And especially the iated to the production of ROS by mitochondria.

udied a salvage pathway enzyme of the Hexosamine a nutrient stress context. In a short time periode (4 months), ork from scratch on in-vitro functional characterization of utrient status and other conditions. I have mastered *in vitro* biochemical, molecular biology, and cell biology approaches to dissect molecular mechanisms in biological systems.

Another project that I have contributed to was the study of the biology of Intraductal Papillary Mucinous Neoplasm(IPMN). This subtype of pancreatic cancer was associated to a small G protein α-s subunit (Gα-s) mutation, that constitutes >60% of cases. A GEMM model had been developed in the laboratory that gave me an extraordinary opportunity to contribute to the study of the oncogenic functions as well as the metabolic consequences of this mutation. I am also honored to be cited in the contributing authors of the article that will be soon published.

Finally, through literature research, I could appreciated the link between metabolism and epigenetics. These two hallmarks of cancer play a critical role of an interface ment and its gene expression regulation.

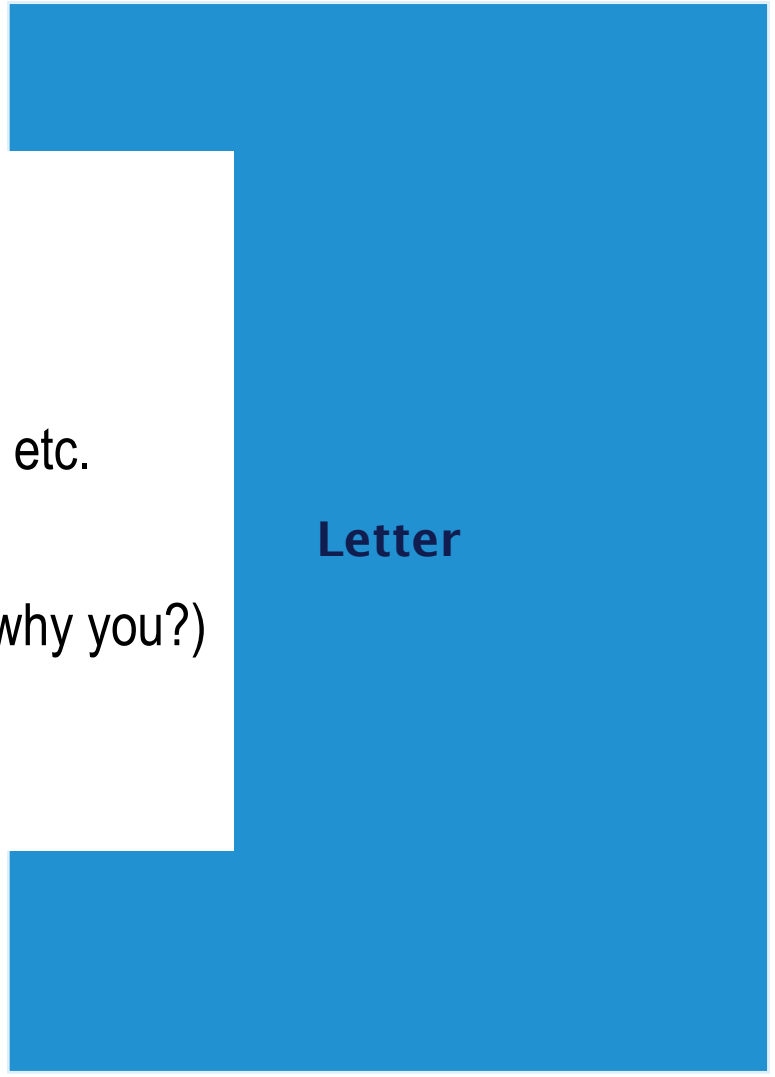
our project on studying the role on DNA modifications in the n activity and especially continue working in an international environment with great fellow scientists in the field.

your valuable time to consider my application. I am looking regarding my application as the time permits.

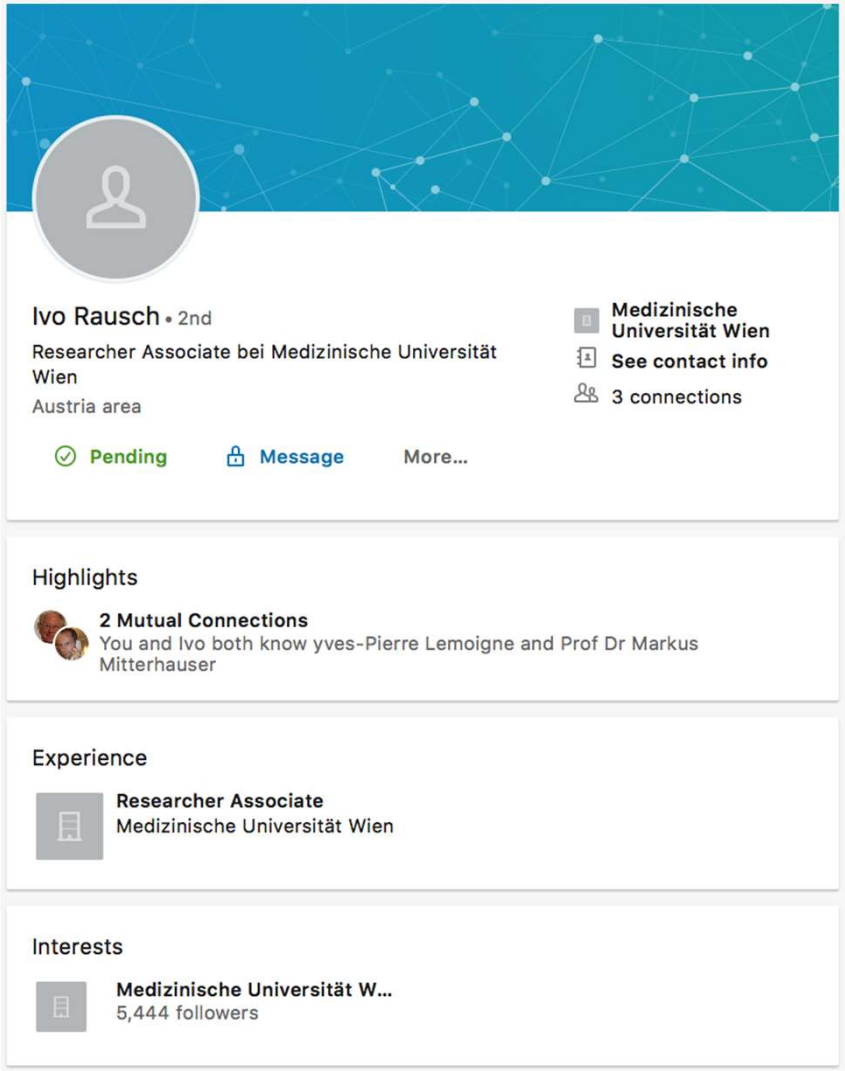
Sincerely,

Application letter

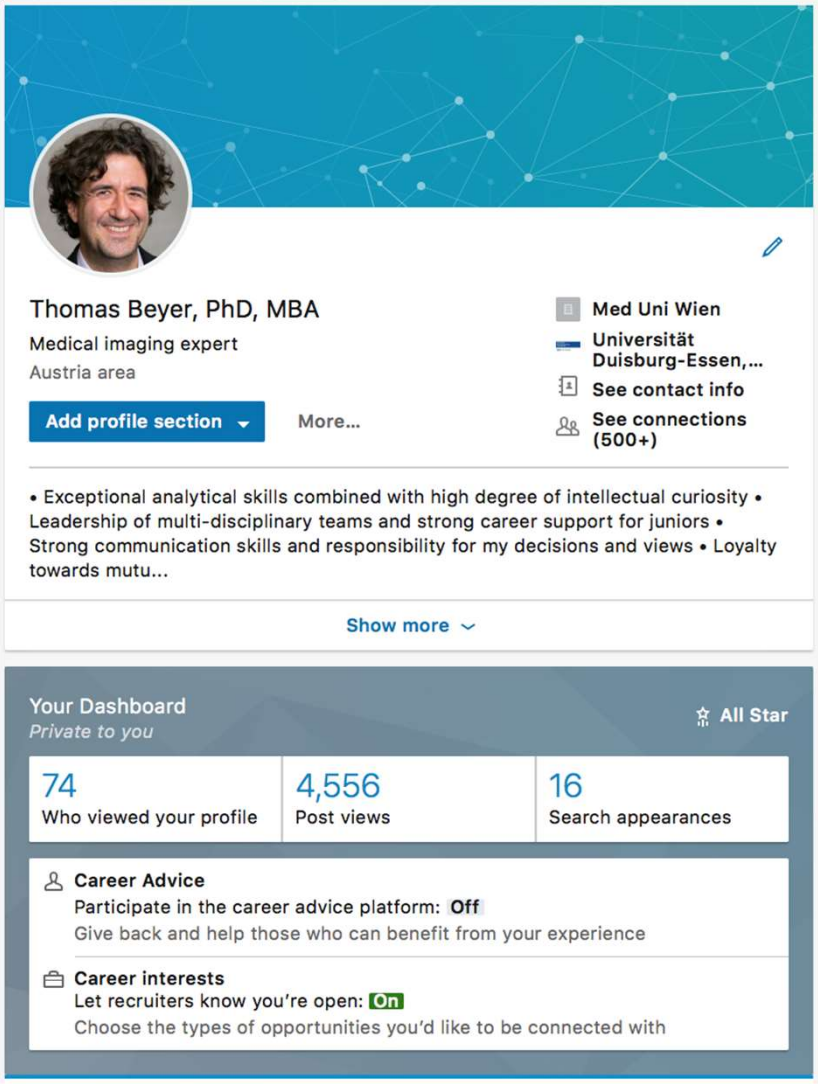
- Stay short, concise and to the point
- Make it personal – relay your story, interests etc.
- Cover the subject (why you write this letter, why you?)
- Looks and feel are important

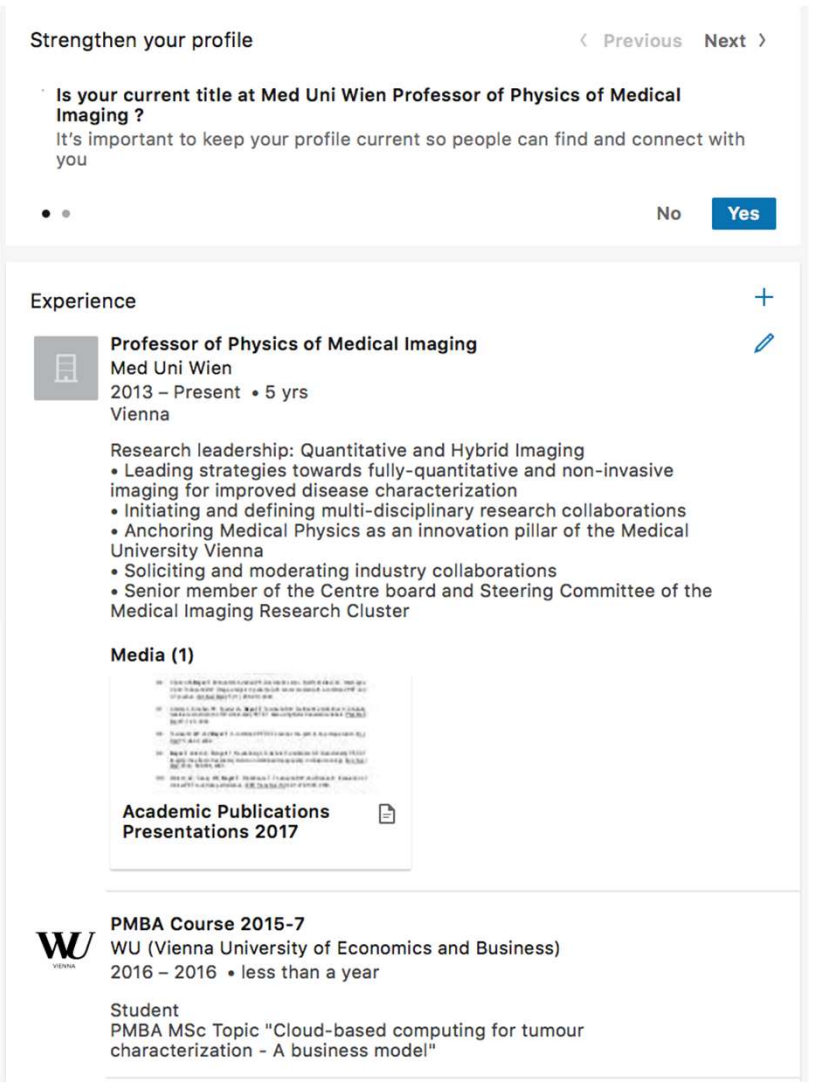


Social media I

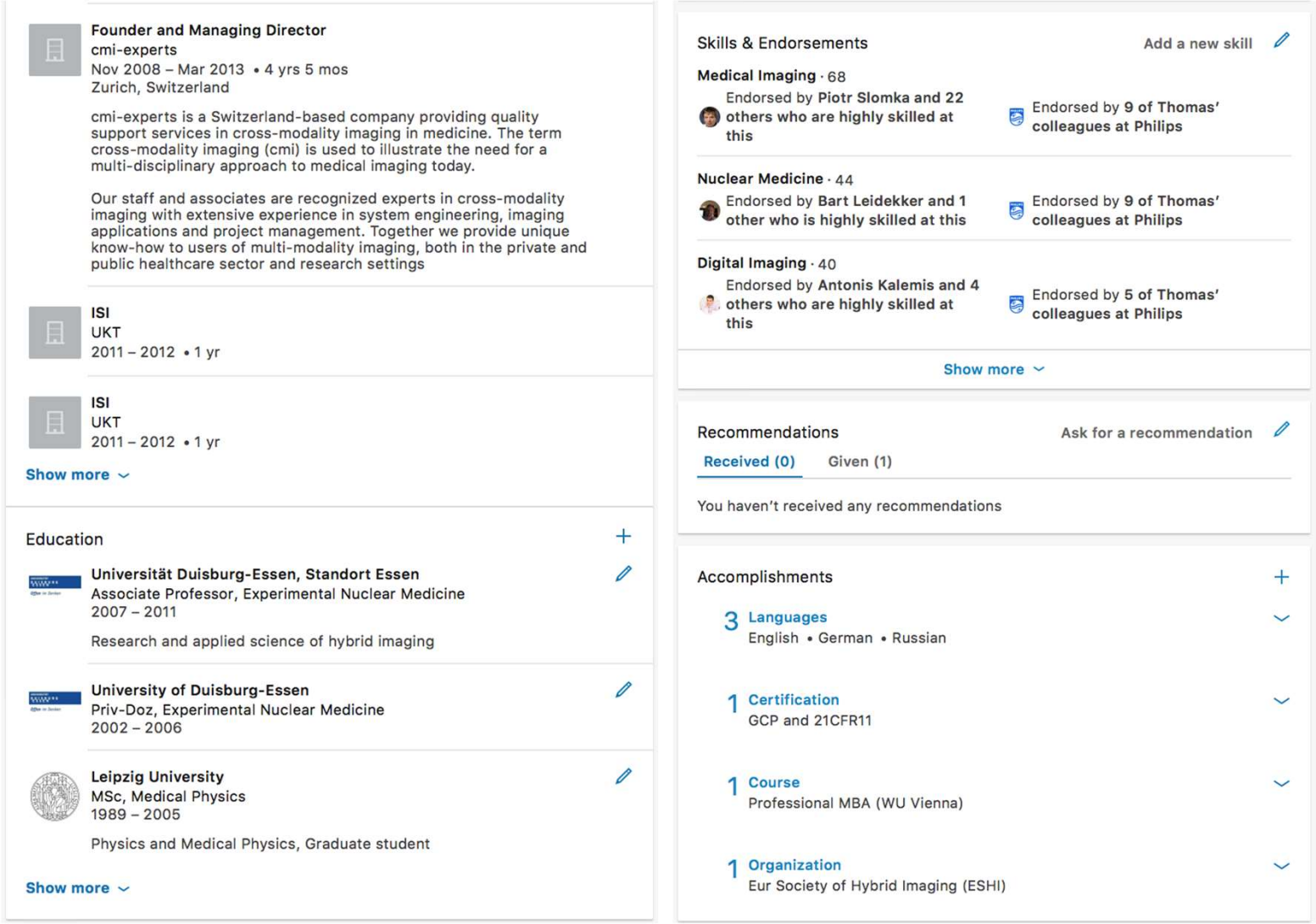


Social media II





Social media III



Founder and Managing Director
cmi-experts
Nov 2008 – Mar 2013 • 4 yrs 5 mos
Zurich, Switzerland

cmi-experts is a Switzerland-based company providing quality support services in cross-modality imaging in medicine. The term cross-modality imaging (cmi) is used to illustrate the need for a multi-disciplinary approach to medical imaging today.

Our staff and associates are recognized experts in cross-modality imaging with extensive experience in system engineering, imaging applications and project management. Together we provide unique know-how to users of multi-modality imaging, both in the private and public healthcare sector and research settings

ISI
UKT
2011 – 2012 • 1 yr

ISI
UKT
2011 – 2012 • 1 yr

Show more

Education

Universität Duisburg-Essen, Standort Essen
Associate Professor, Experimental Nuclear Medicine
2007 – 2011

Research and applied science of hybrid imaging

University of Duisburg-Essen
Priv-Doz, Experimental Nuclear Medicine
2002 – 2006

Leipzig University
MSc, Medical Physics
1989 – 2005

Physics and Medical Physics, Graduate student

Show more

Skills & Endorsements — Add a new skill

Medical Imaging · 68
Endorsed by **Piotr Slomka and 22 others who are highly skilled at this**
Endorsed by **9 of Thomas' colleagues at Philips**

Nuclear Medicine · 44
Endorsed by **Bart Leidekker and 1 other who is highly skilled at this**
Endorsed by **9 of Thomas' colleagues at Philips**

Digital Imaging · 40
Endorsed by **Antonis Kalemis and 4 others who are highly skilled at this**
Endorsed by **5 of Thomas' colleagues at Philips**

Show more

Recommendations — Ask for a recommendation

Received (0) Given (1)

You haven't received any recommendations

Accomplishments

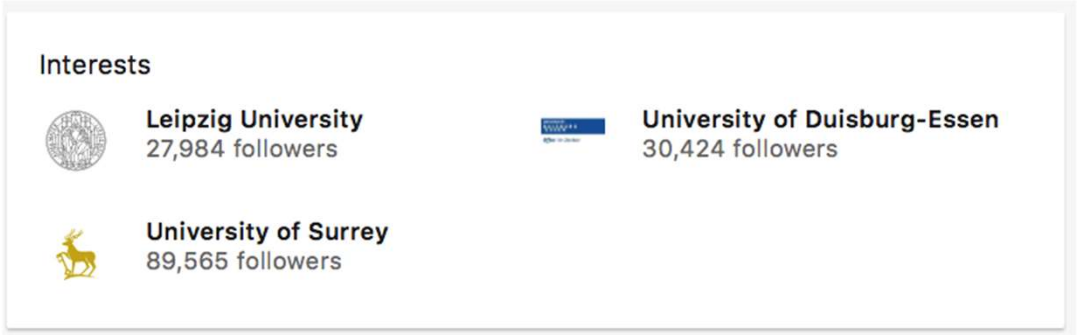
3 Languages
English • German • Russian

1 Certification
GCP and 21CFR11

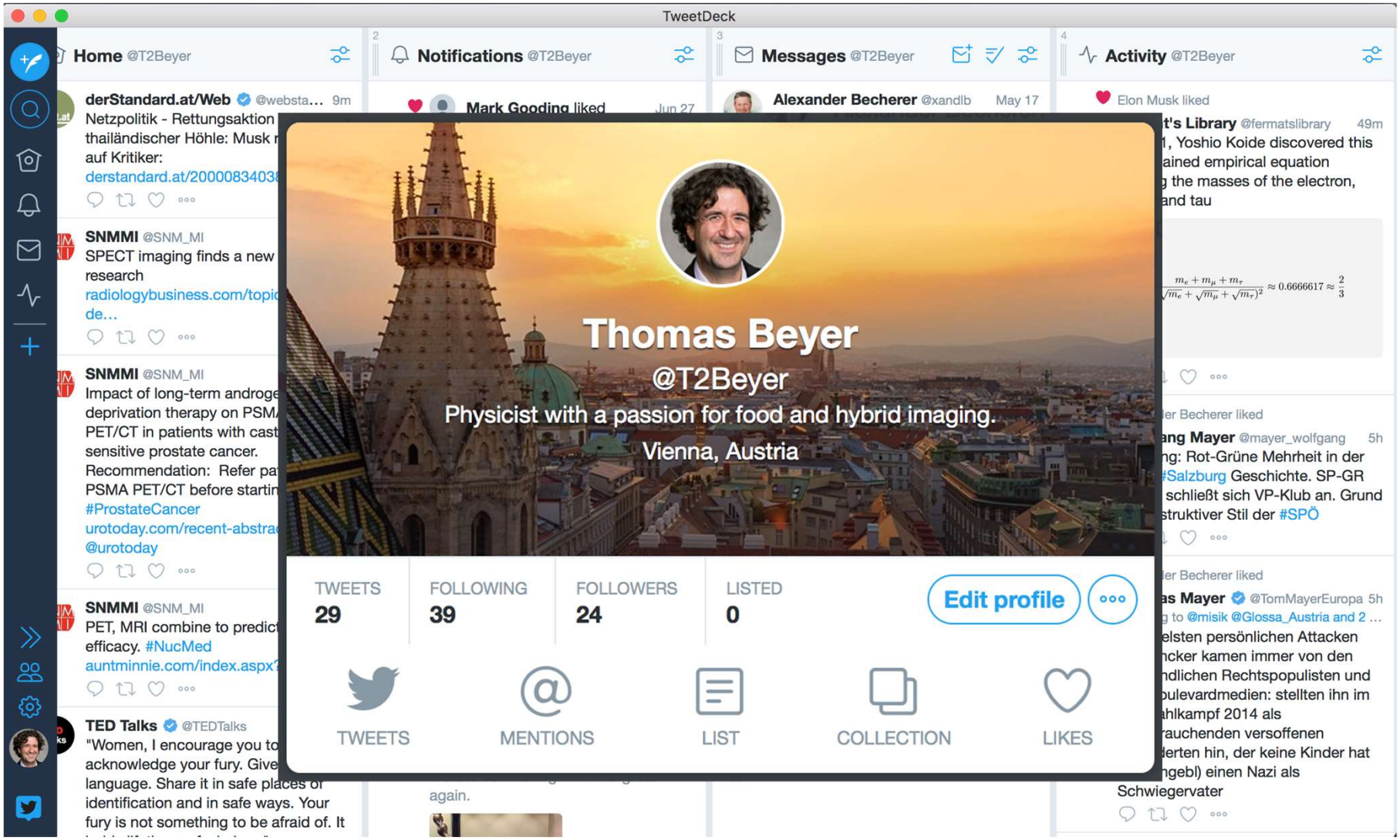
1 Course
Professional MBA (WU Vienna)

1 Organization
Eur Society of Hybrid Imaging (ESHI)

Social media IV



Social media V



Social media VI

ZENTRUM FÜR MEDIZINISCHE PHYSIK UND BIOMEDIZINISCHE TECHNIK
MEDIZINISCHE UNIVERSITÄT WIEN

Home | Allgemeine Informationen | Dienstleistungen | Studium & Lehre | Wissenschaft & Forschung

Wissenschaft & Forschung / IMPAQT / Quantitative Imaging and Medical Physics (QIMP)

- Division MR Physics
- Optical Imaging
- IMPAQT
  - Ultrasound Lab
  - Digital Image Processing
  - Diagnostic Radiology Physics
  - Quantitative Imaging and Medical Physics (QIMP)
    - Publications
- Neuroprothetics (FES) / Rehabilitation Engineering
- Cardiovascular Dynamics / Artificial Organs
- Functional Insulin Treatment
- Research Partners

QIMP: Quantitative Imaging and Medical Physics

Tel. +43 (0)1 40400 - 39890

Fax. +43 (0)1 40400 - 39880

- Research
- News
- Members
- Research projects
- Collaborations
- Highlighted Publications

Our group, QIMP - Quantitative Imaging and Medical Physics, is integrated within the Center of Medical Physics and Biomedical Engineering. Together, we are part of the Medical University of Vienna. The QIMP team brings together enthusiastic and innovative people from different walks of science an d engineering, to translate technical methodologies from bench to bedside.

We are committed to sourcing knowledge and sharing experience through cross-speciality engagements. Our vision is to make every photon count to the benefit of patients.

MEDIZINISCHE UNIVERSITÄT WIEN

Detail

Home › Forschung › Researcher Profiles › Researcher Profiles › Detail

Dipl.-Ing. Ivo Rausch, PhD

Center for Medical Physics and Biomedical Engineering
Position: Research Associate (Postdoc)

ORCID: 0000-0002-4007-1669
T +43 1 40400 55450
ivo.rausch@meduniwien.ac.at

Further Information

Keywords

Medical Physics; Nuclear Medicine; Positron-Emission Tomography; Tomography, Emission-Computed

Research group(s)

- QIMP group

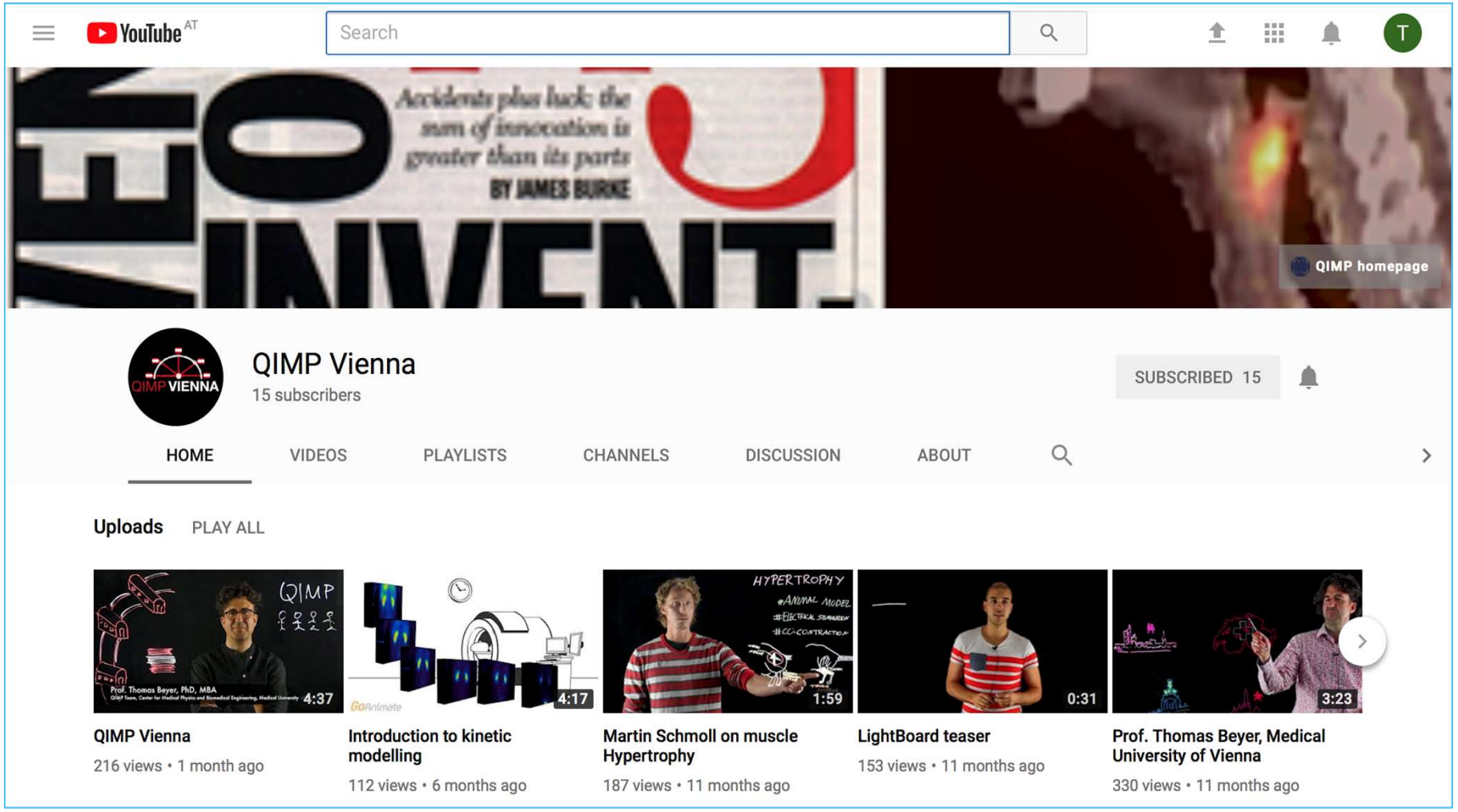
Research interests

Research on quantification and standardization of nuclear medicine imaging data with a focus on multi-modality imaging devices. This includes in particular PET/CT and PET/MRI systems.

Techniques, methods & infrastructure

PET/CT, PET/MRI, SPECT/CT

Social media VII



Social media

- Picture seeing yourself from the outside.
- Act professionally.
- Be informative. Be honest.
- Be active. Be aware.

QIMP VIENNA

thomas.beyer@meduniwien.ac.at

MEDICAL UNIVERSITY
OF VIENNA

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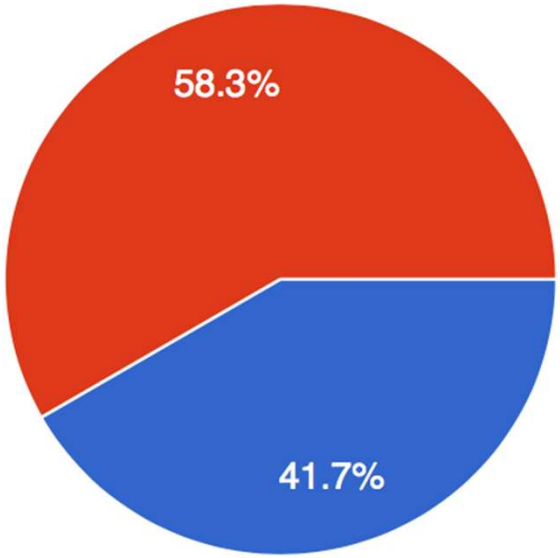
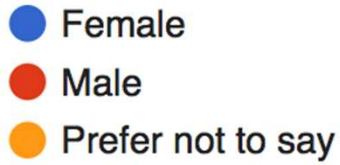
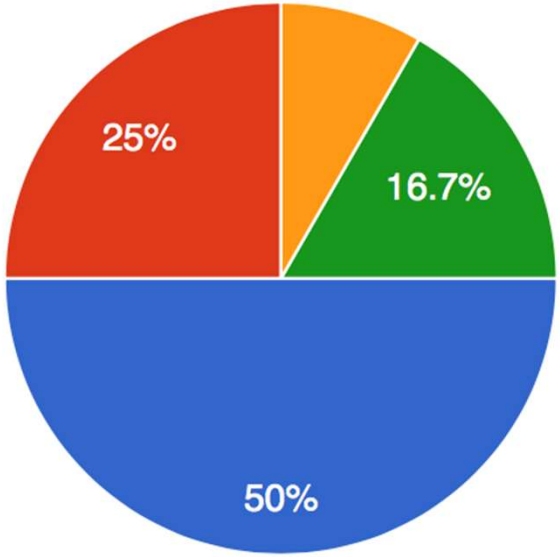
This block is for you! Get engaged!

Student survey: 2018 Results







Gender and Age

Student survey: 2018 Results

5 Electr. Engineering/Physics & IT

3 Applied/Medical Physics

1 Radiology/RT

2 Genetics/Biology

1 Metrology

What do you study ?

-Medical physics (2)

-Medicine

-Physics Engineering (2)

-Electrical Engineering and IT

-Medical Physics and Biophysics

-Physics

Student survey: 2018 Results

What is your current position?

12 responses

I don't have a current position. I'm starting a Biomedical Engineering MSc in September.
Medical Physicist
Radiology technologist
IT Data Entry in Hospital "Nene Tereza"
MSc in Oncology
physical engeener
student
Student (PM medical fizik)
Currently working as a physicist at the Laboratory "Radiation protection in medical exposures" to "National Center of Radiobiology and Radiation Protection" of the Ministry of Health of Bulgaria. At the same time on July 15, 2018, I was enrolled as a full-time Ph.D. student at Sofia University "St. Kliment Ohridski" in the field of Physics with specialty Biophysics.
Student
Teaching and research assistant
Unemployed/Future master student (September)

Student survey: 2018 Results

I finished a general high school, enrolled in the previously mentioned bachelors degree, I did a lot of volunteering during my studies, I discovered the field biomedical engineering, my BSc thesis was in cooperation with a hospital radiotherapy department, I worked on a research with a professor from the faculty of Medicine, I applied for a few masters and got accepted, I will start the MSc in biomedical engineering abroad in September.

Nuclear Medicine Physics resident looking

7 years in u

After finish

I have attai one and a half years hands on experience in laboratory. Since I have attended different scientific conferences/symposiums. Explored different professional pathways.

I currently v d the maintenan eer because I a

I'm still a student, but i have study a lot and i have worked hard to finish my study

I studied ph

My current

I will like to go further with my studies in a PhD

Research assistant in the field of theoretical electrical engineering (1 year)
Technical Inspector of Electric Power Devices and Installations (1 year)
Teaching and research assistant in the field of general and applied physics (2 years - ongoing)

During my academic studies I was focused on computer technologies.

High-school > BSc > Volunteering > Cooperation > Mentorship > MSc > Abroad

Focus and Continuity

Additional studies w/ new career options

Student survey: 2018 Results

I wanted to study the human brain but I only knew about psychology and medicine (neurology) which aren't very well paid in Macedonia, nor the programmes are very good. I chose to enroll in engineering because it's more perspective, it's one of the best faculties in the country and I was good at math and physics. Then:

1. I realized that the resea … d material engineering

Interests ≈ Reality options

-Couldn't find a job after MSc, now working in other field

-PhD studies

-After BSc planning further studies also abroad

-BSc -> MSc -> PhD: benefits from intra educational turning points (short-term projects)

"Ultimately in life I wish to do research, which contributes to understanding the working of the brain"

Take a risk.

my turning point in my career was when I first started working as an engineer in my current company, as I still do

Student survey: 2018 Results

Perseverance, enthusiasm, passion, vision, knowledge, social sk

Never stop learning and being up-to-date with the latest technologie

implementing knowledge from the previous education and scientific ap

Firstly , Finish Master Science, and work for one until two years and star work in my profession.

It requires the capability of analytical and creative thinking to design and ana ce and flexibility in the work your doing

Perseverance

Knowledge

Analytics

Flexibility

-"Perseverance, passion, enthusiasm, altruism; but also good grades, Love for teaching"
-Publications and personal network
-"Working"
-Tolerance for failure
-Time management
-"Never give up!"
-Accept responsibilities
-"only study hard"

Student survey: 2018 Results

Discipline, creativity, knowledge, vision, social skills

Soft skills

Making staff and piers to work together, side by side, overcoming any situation or problem

working eficientlly while focusing on geting the best results out of it

Efficiency

In my mind key characteristic for a business career is : communication and luc

You need to have good communication and negotiation skills. Also it requires the capability of analytical thinking to assess business trends and strategies, and generate entrepreneurial ideas

Flexibility

-Same as Academic + "social skills"
-Sales and negotiation skills
-"A business career is a harder step as academia because it takes harder work"
-Courage to start an own business
-"Education helps open your eyes"
-Professional network
-Experience
-Personal skills

Student survey: 2018 Results

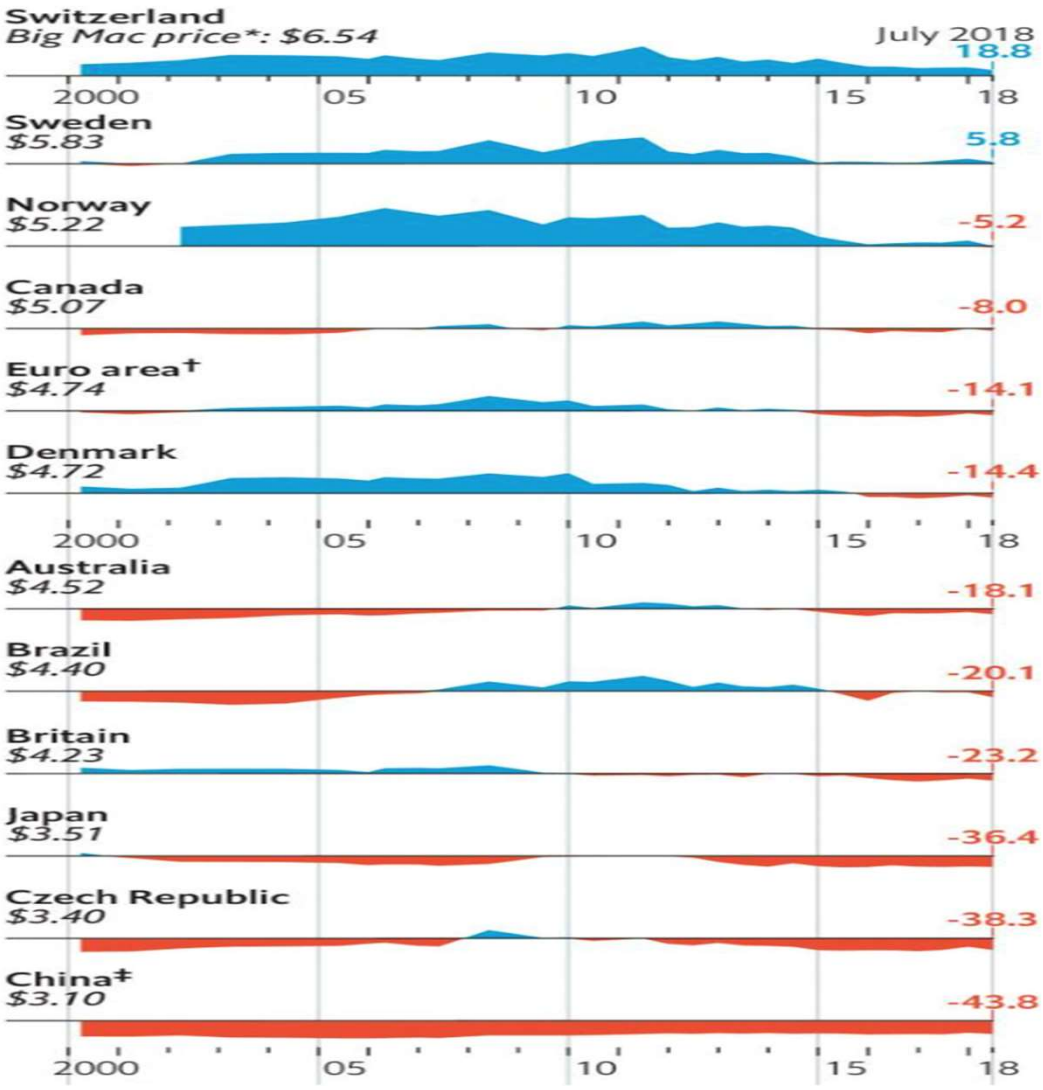
For being a lab assistant at university I am paid ~100EUR per semester. My colleagues who are working as electrical engineers earn around 300 EUR per month.
4500
7200
290 Euro
0
550 Euro
3800
0(EUR)
3000 (three thou
2000 €
5.000
~38 000

- Varies strongly with country:
- 300-400€ Graduate engineer
- 300 € MSc Physics
- "Human mind is never pleased with its salary and always wants more
- A factor of 2 between received and perceived salary
- Additional income is needed for studying (cf work-life balance)

Student survey: 2018 Results

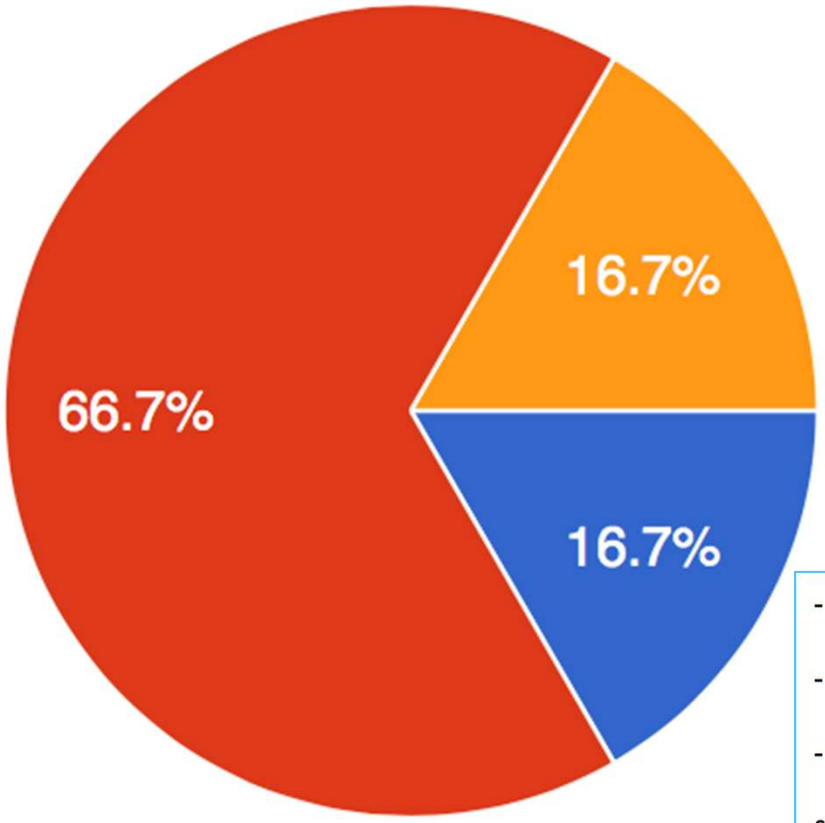
Is …	Should be …
For being a lab assistant at university I am paid ~ electrical engineers earn around 300 EUR per mo	Depends on the country. In Macedonia around 6000EUR.
4500	In Macedonia at least 12000
7200	12000
290 Euro	390 Euro
0	33- 35 K
550 Euro	1200Euro

Student survey: 2018 Results



„Burgernomics“ (The Economist, Jul-13, 2018)

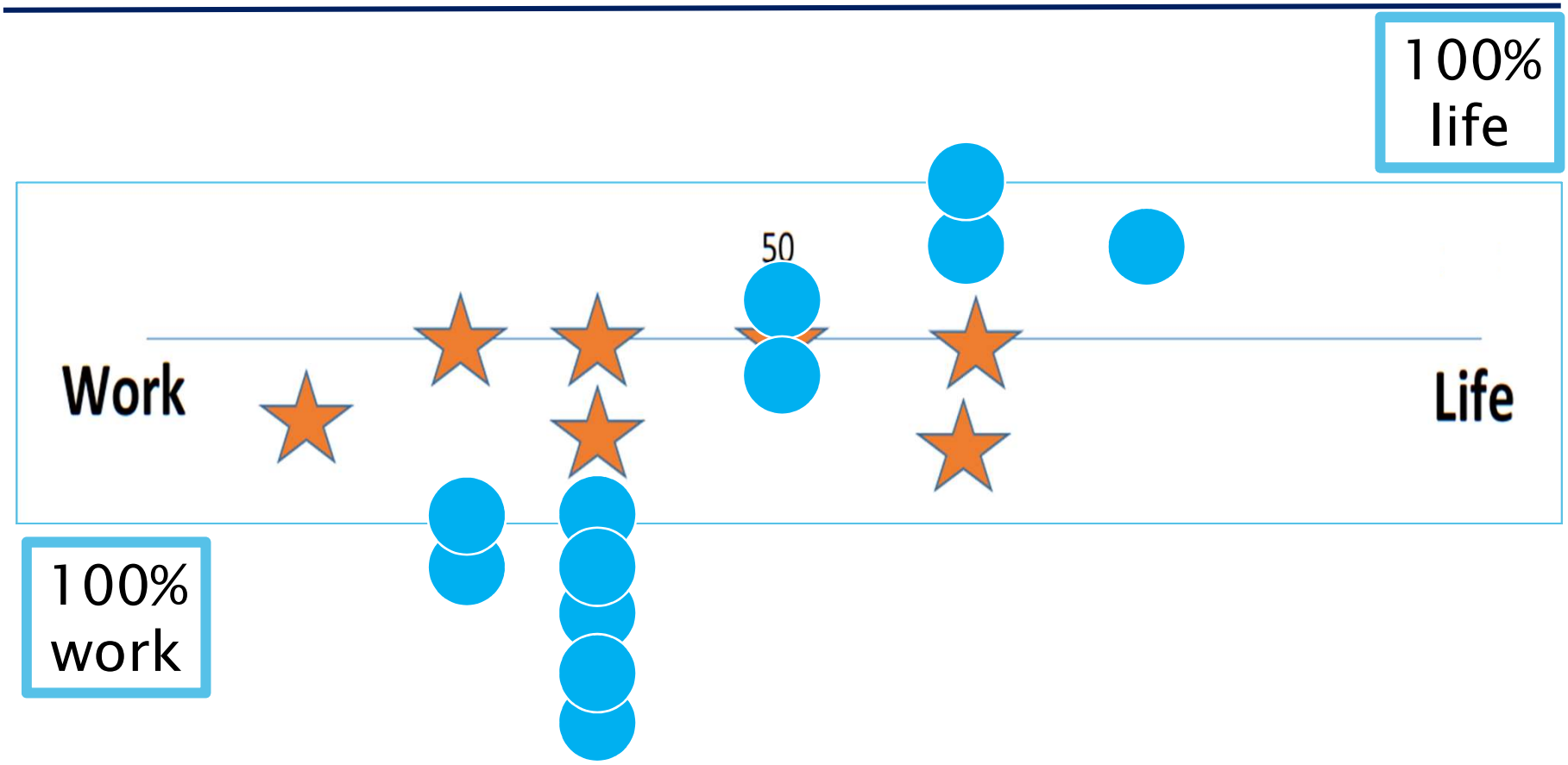
Student survey: 2018 Results



Yes
No
Maybe

- Yes: 4
- No: 2
- " I don't think so, a woman can reach the same things only by studying hard"
- "We need to be beware of stereotypes" (cf "Fixed mind set")

Student survey: 2018 Results



" I think more people in science have no time for life / family"

Student survey: 2018 Results

I would not enroll in a different field for my bachelors
I would have not been the person I am today if I haven't gone through the obstacles and situations that life brought me. After all, smooth seas don't make skillful sailors
reconsider about job oportunities
I would not change anything except to learn more English.
nothing
the experience
learn more
Maybe you will study at a
Actually, I started again. A the same.
I would made my second
I will choose a specializa

Experiences abroad

Language skills

Alt. studies/fields

Expand knowledge

- Physics -> Economy
- Power engineering -> Hardware engineering
- add experience abroad
- work harder
- "I would do the same thing"
- Improve language skills
- Start academic career abroad

Changing all over again ?

Conclusion

- People are different.
- People grow up in different circumstances.
- Aim high. Stay on it.
- Maintain a social anchor (parents, friends, partner, wife …).
- Network.
- Seek and use opportunities.
- Go abroad. Widen your horizon.
- Never stop learning and/or gaining experiences.
- It is your life, your choice, your fortune.

MEDICAL UNIVERSITY OF VIENNA

www.atelier-mof.de

QIMP VIENNA

thomas.beyer@meduniwien.ac.at

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OF VIENNA

Agenda

- Monday
  - Introduction and Motivation
- Tuesday
  - Your CV and Your letter of application
- Wednesday
  - Student survey 2019 (vs 2017-8): Of wishes and reality …
- Thursday
  - *Hospital visit*
- Friday
  - Update (CV, letter) and Q&A

Get funded and publish

Funding schemes

Intramural & Extramural

There is a multitude of funding opportunities: from local to international

- Short term travel grants
- Exchange programs
- Stand alone project funding
- Funding for collaborative projects (e.g. multilateral)
- The big ones: EU / NIH … funding (e.g. Horizon2020…)

Select the right funding scheme for your purpose

Examples for the small ones

~1’000 EUR

EUROPEAN SOCIETY OF RADIOLOGY

August 2016

Invest in the Youth application NOW OPEN! 1,000 places available

This year we are expanding our popular Invest in the Youth programme to offer **1,000 young trainees the chance to attend the ECR free of charge.** The programme is open to young trainee radiologists, radiographers and physicists who are ESR members for 2016, and successful applicants will receive free registration for ECR 2017 as well as hotel accommodation for the duration of the congress.

Full criteria and application info

~1’000 EUR

NVIDIA ACCELERATED COMPUTING Downloads Training Ecosystem Forums Join Login

GPU Grant Program

Home > ComputeWorks > Academic Collaboration > GPU Grant Program

NVIDIA's Academic Programs Team is dedicated to empowering and collaborating with professors and researchers at universities worldwide. We aim to inspire cutting-edge technological innovation and to find new ways of enhancing faculty research as well as the teaching and learning experience. We achieve this through a variety of initiatives and programs including:

- Small scale GPU grants
- Graduate Fellowships
- Providing free teaching materials and GPU cloud resources through our Deep Learning Institute (DLI) Teaching Kits
- Providing access to developer forums, pre-released tools and drivers through the NVIDIA Developer Program

Small grants for conferences or equipment

Example: scholarships

Government Funding In Macedonia Available For Students In STEM Fields

The Ministry of Education and Science in Macedonia is continuing to offer its generous scholarship program for academic studies to students accepted to one of the top 100 ranked universities, or the top 200 ranked universities in the field of technical sciences, according to the latest Academic Ranking of World Universities (ARWU) published by the Center for World-class Universities in Shanghai Jiao Tong University. The Prime Minister, in announcing the scholarship program in 2012, noted: "Each year the Government will support young, ambitious people, who manage to enroll in the best universities across the globe but cannot afford to pay for their studies, to complete their education."

MORE INFORMATION →

LOCATION
Macedonia

SCHOLARSHIP DEADLINE
September 1, 2017
Recurs Annually

DEGREE LEVELS
Undergraduate - Bachelor's

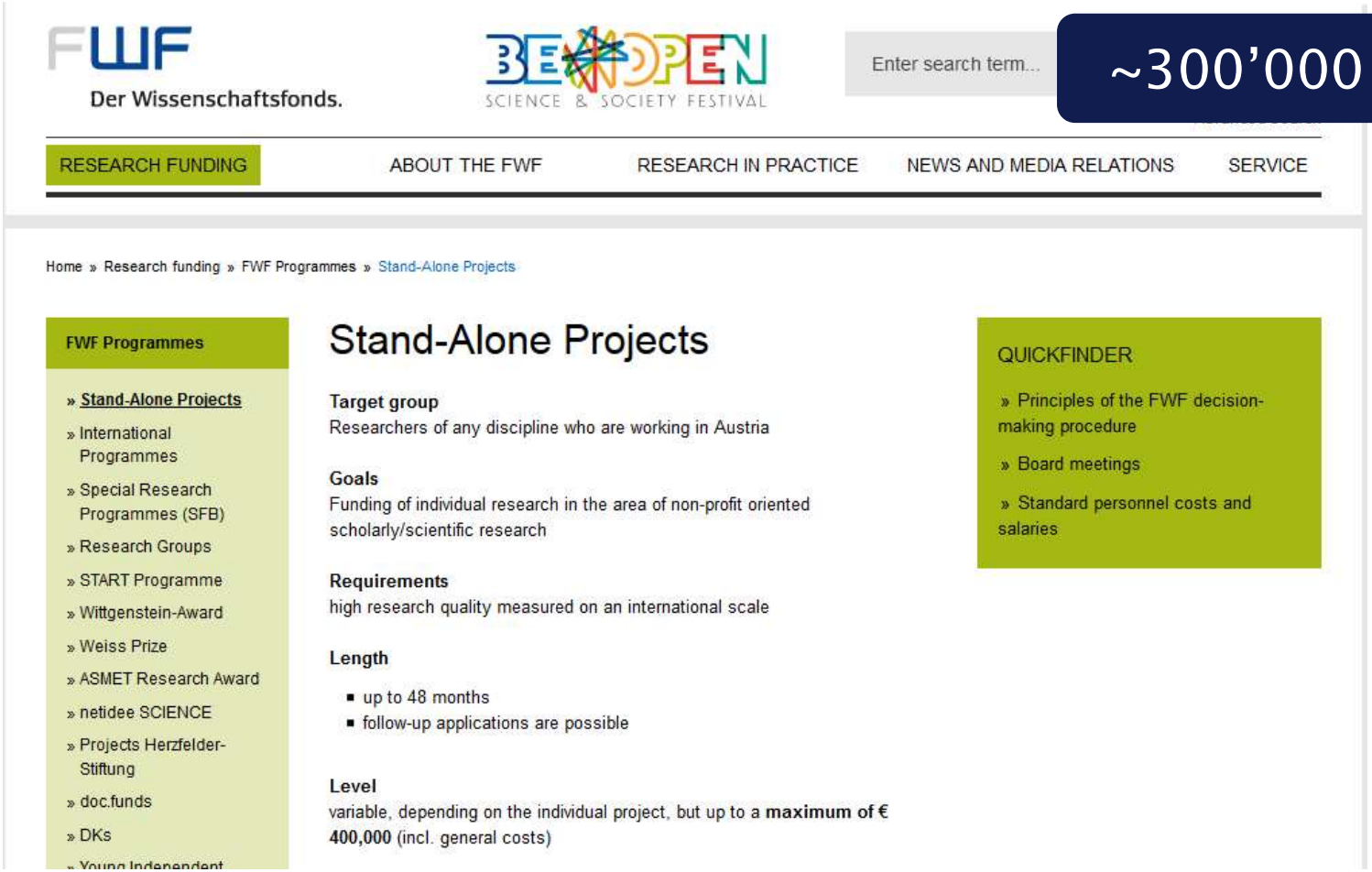
DURATION OF AWARD
Four years

MAXIMUM AMOUNT OF AWARD
$40,000 for tuition costs per year plus an airplane ticket and a monthly stipend for living costs

Scholarships for exchange semesters or studying abroad

Example: stand alone project

~300'000 EUR



FWF
Der Wissenschaftsfonds.

BE OPEN
SCIENCE & SOCIETY FESTIVAL

Enter search term...

RESEARCH FUNDING | ABOUT THE FWF | RESEARCH IN PRACTICE | NEWS AND MEDIA RELATIONS | SERVICE

Home » Research funding » FWF Programmes » Stand-Alone Projects

FWF Programmes

- » Stand-Alone Projects
- » International Programmes
- » Special Research Programmes (SFB)
- » Research Groups
- » START Programme
- » Wittgenstein-Award
- » Weiss Prize
- » ASMET Research Award
- » netidee SCIENCE
- » Projects Herzfelder-Stiftung
- » doc.funds
- » DKs
- » Young Independent

Stand-Alone Projects

Target group
Researchers of any discipline who are working in Austria

Goals
Funding of individual research in the area of non-profit oriented scholarly/scientific research

Requirements
high research quality measured on an international scale

Length

- up to 48 months
- follow-up applications are possible

Level
variable, depending on the individual project, but up to a **maximum of € 400,000** (incl. general costs)

QUICKFINDER

- » Principles of the FWF decision-making procedure
- » Board meetings
- » Standard personnel costs and salaries

Stand alone projects, e.g. funding 1-3 PhD students for ~3j

Example: the big ones

European Commission
Research & Innovation - Participant Portal
Proposal Submission Forms
Research Executive Agency

3'860'000 EUR

Horizon 2020

Call: H2020-MSCA-ITN-2017
(Marie Sklodowska-Curie Innovative Training Networks)

Topic: MSCA-ITN-2017

Type of action: MSCA-ITN-ETN
(European Training Networks)

Proposal number: 764458

Proposal acronym: HYBRID

Deadline Id: H2020-MSCA-ITN-2017

Table of contents

Section	Title	Action
1	General information	
2	Participants & contacts	
3	Budget	
4	Ethics	
5	Call-specific questions	

How to fill in the forms?

The administrative forms must be filled in for each proposal using the templates available in the submission system. Some data fields in the administrative forms are pre-filled based on the previous steps in the submission wizard.

H2020-ITN-2017.pdf Ver 1.00 20160914 Page 1 of 46 Last saved 02/01/2017 15:29:23

This proposal version was submitted by Holm GRAESSNER on 10/01/2017 08:19:11 Brussels Local Time. Issued by the Participant Portal Submission Service.

Multi-national projects involving multiple partners

Grants

… are non-repayable funds or products disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a nonprofit entity, educational institution, business or an individual. In order to receive a grant, some form of "Grant Writing" often referred to as either a proposal or an application is required. Most grants are made to fund a specific project and require some level of compliance and reporting.

Prerequisites

- Idea
- Your own profile
- Which research topic are you associated with?
- Are these topics in sync with trends?
- Can people (reviewers!) clearly see your independence?
- How well published are you?
- What about your network/peers/mentors?

How to…

- Define your aim/ project
- **Search for a suitable funding scheme**
  Google is a good source of information
  Approach the: Local university, local government, NGOs, European Commission…
  Approach: your professors, colleagues…
- **Read the requirements carefully and adapt your project accordingly.**
- Ask in your network if someone has already experience and is willing to give you some hints
- Write the application

Writing the application

A proposal needs multiple iterations before it's finished

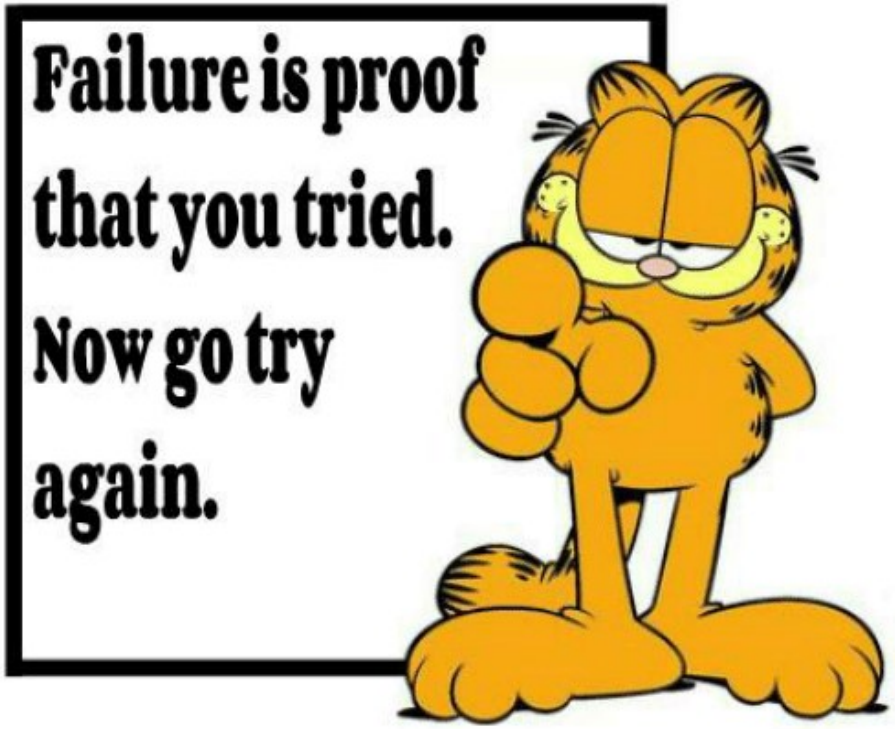
- Make a plan (writing can easily take a few month)
- Be aware of deadlines!!
- Involve your co-PIs in the writing from the beginning.

Fully meet the requirements

- Applications are rejected because of minimal deviations from the requirements (e.g. required paragraph is missing, one of the PIs does not meet the criteria…)

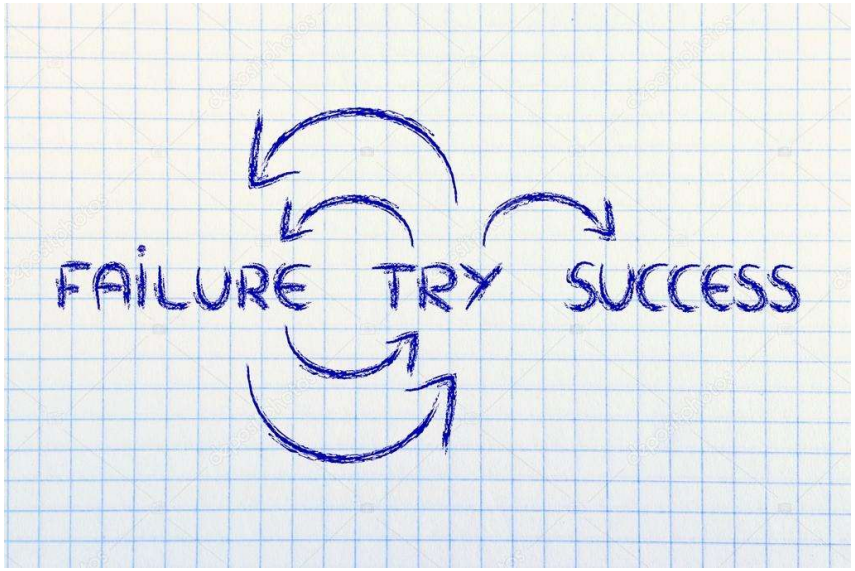
Small "mistakes" can result in straight rejection!

Failure



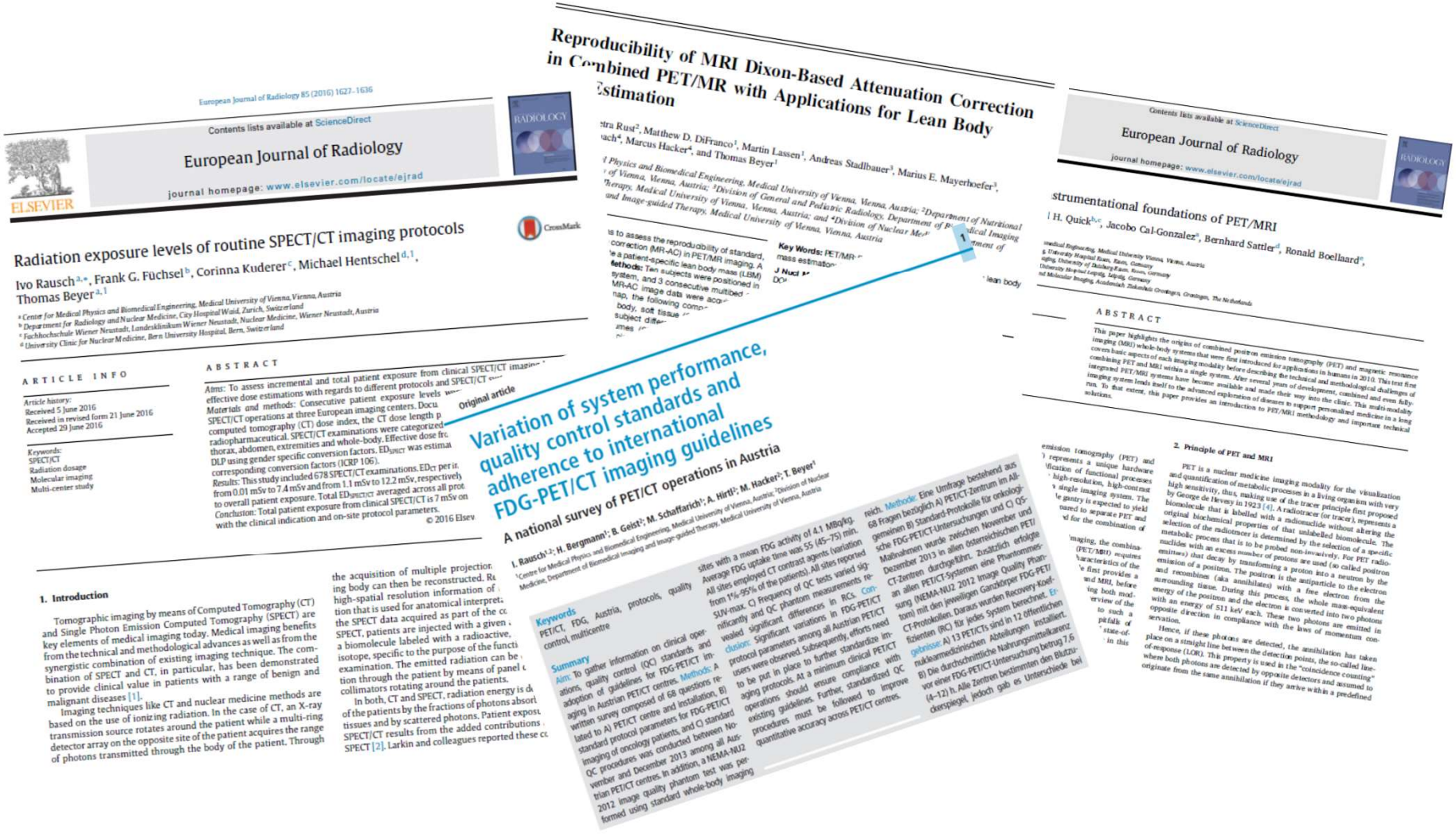
- Accept reviewer comments
- Improve your grant
- Add new data
- Modify your partners
- Mind new guidelines
- Stay focused, be quick
- Energy, endurance, …, luck

Success



- Enjoy the moment
- Gather your partners
- HR – staffing
- Check your plans/WPs
- Get to work
- Mind progress reports
- Publish, or perish
- Focus, endurance, …,
- Continue writing grants

Publishing



Contents lists available at ScienceDirect

European Journal of Radiology

journal homepage: www.elsevier.com/locate/ejrad

Radiation exposure levels of routine SPECT/CT imaging protocols

Ivo Rausch, Frank G. Füchsel, Corinna Kuderer, Michael Hentschel, Thomas Beyer

ARTICLE INFO

ABSTRACT

1. Introduction

Reproducibility of MRI Dixon-Based Attenuation Correction in Combined PET/MR with Applications for Lean Body Estimation

Original article

Variation of system performance, quality control standards and adherence to international FDG-PET/CT imaging guidelines

A national survey of PET/CT operations in Austria

Contents lists available at ScienceDirect

European Journal of Radiology

journal homepage: www.elsevier.com/locate/ejrad

Instrumentational foundations of PET/MRI

ABSTRACT

2. Principle of PET and MRI

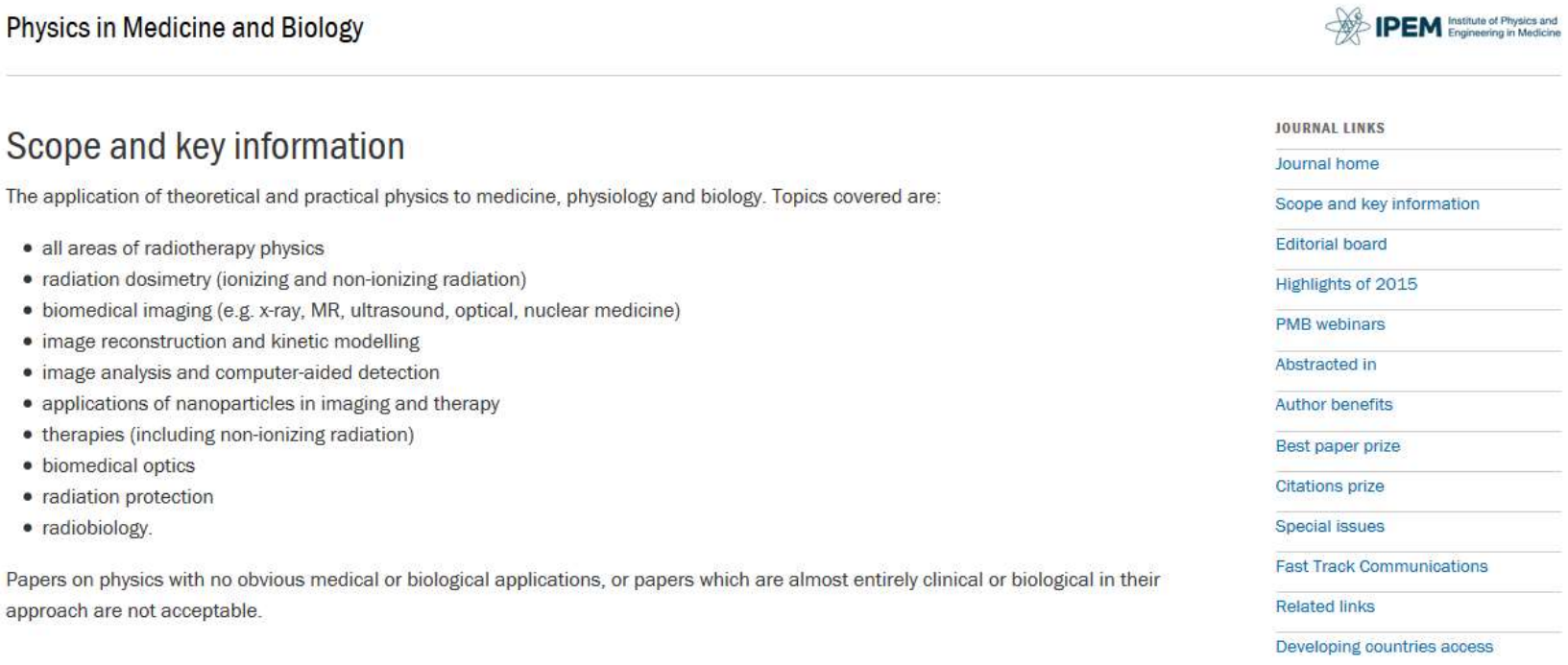
Before you start

Is my work ready to be published?

- Significance
  Did you address an important problem in your field?
- Novelty
  Has someone else addressed this problem (with positive results)?
  If yes, is your proposed solution novel? Superior to others?
- Validity
  Are your results valid and consistent?
- Impact
  Will your results have an impact in the field?

Selecting a journal

Journal audience and scope (check the journal webpage and browse to back issues to understand the journal style).



Physics in Medicine and Biology

IPEM Institute of Physics and Engineering in Medicine

Scope and key information

The application of theoretical and practical physics to medicine, physiology and biology. Topics covered are:

- all areas of radiotherapy physics
- radiation dosimetry (ionizing and non-ionizing radiation)
- biomedical imaging (e.g. x-ray, MR, ultrasound, optical, nuclear medicine)
- image reconstruction and kinetic modelling
- image analysis and computer-aided detection
- applications of nanoparticles in imaging and therapy
- therapies (including non-ionizing radiation)
- biomedical optics
- radiation protection
- radiobiology.

Papers on physics with no obvious medical or biological applications, or papers which are almost entirely clinical or biological in their approach are not acceptable.

JOURNAL LINKS

Journal home
Scope and key information
Editorial board
Highlights of 2015
PMB webinars
Abstracted in
Author benefits
Best paper prize
Citations prize
Special issues
Fast Track Communications
Related links
Developing countries access

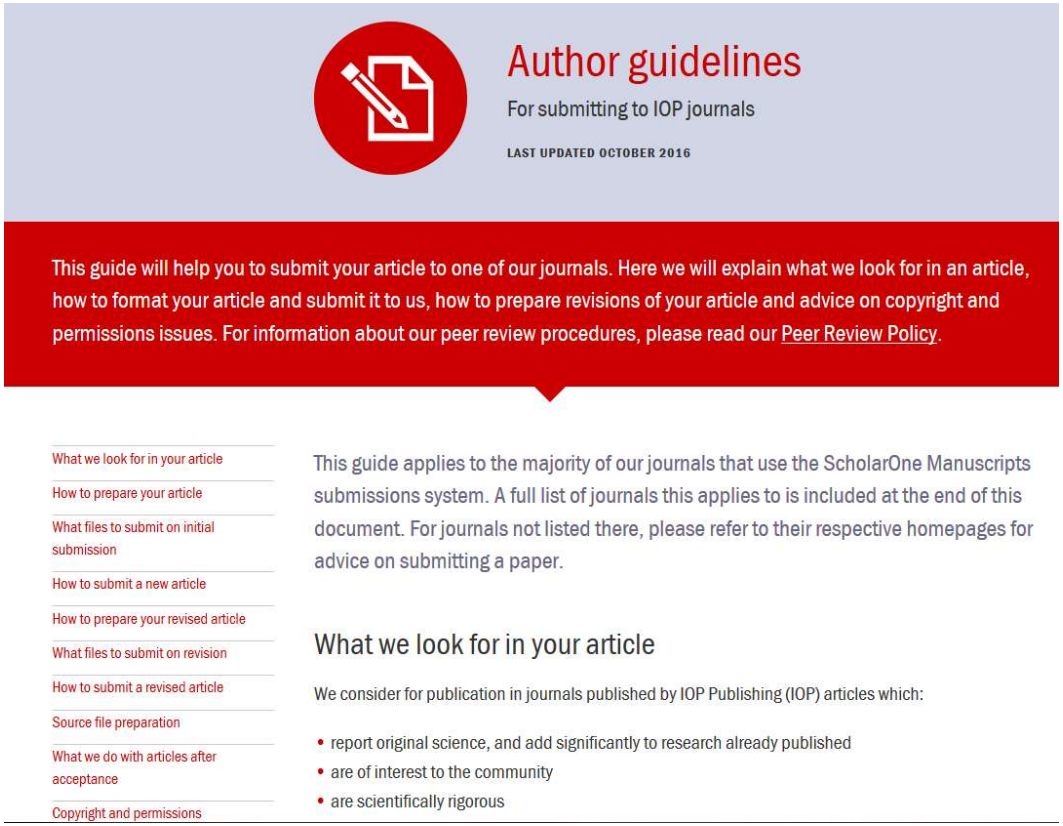
Have a look at the journals reputation!

Writing the publication

First of all: read the Author guidelines!

Structure:

1. Title page
2. Abstract
3. Introduction
4. M&Ms
5. Results
6. Discussion
7. Conclusion



Author guidelines

For submitting to IOP journals

LAST UPDATED OCTOBER 2016

This guide will help you to submit your article to one of our journals. Here we will explain what we look for in an article, how to format your article and submit it to us, how to prepare revisions of your article and advice on copyright and permissions issues. For information about our peer review procedures, please read our Peer Review Policy.

What we look for in your article
How to prepare your article
What files to submit on initial submission
How to submit a new article
How to prepare your revised article
What files to submit on revision
How to submit a revised article
Source file preparation
What we do with articles after acceptance
Copyright and permissions

This guide applies to the majority of our journals that use the ScholarOne Manuscripts submissions system. A full list of journals this applies to is included at the end of this document. For journals not listed there, please refer to their respective homepages for advice on submitting a paper.

What we look for in your article

We consider for publication in journals published by IOP Publishing (IOP) articles which:

- report original science, and add significantly to research already published
- are of interest to the community
- are scientifically rigorous

Writing is an iterative process together with your co-authors!

Writing the publication

PET/MRI·for·oncological·brain·imaging:·A·comparison·of·standard·MR-based·attenuation·corrections·with·a·novel,·model-based·approach·for·the·Siemens·mMR·PET/MR·system¶

Ivo·Rausch[1],·Lucas·Rischka[2],·Claes·N.·Ladefoged[3],·Julia·Furtner[4],·Matthias·Fenchel[5],·Andreas·Hahn[2],·Rupert·Lanzenberger[2],·Marius·E.·Mayerhoefer[4],·Tatjana·Traub-Weidinger[6]·and·Thomas·Beyer[1]¶

1·Center·for·Medical·Physics·and·Biomedical·Engineering,·Medical·University·of·Vienna,·Austria¶

2·Department·of·Psychiatry·and·Psychotherapy,·Medical·University·of·Vienna,·Austria·¶

3·Department·of·Clinical·Physiology,·Nuclear·Medicine·and·PET,·University·of·Copenhagen,·Denmark¶

4·Division·of·Neuroradiology,·Medical·University·of·Vienna,·Vienna,·Austria¶

5·Siemens·AG,·Healthcare,·Magnetic·Resonance,·Erlangen,·Germany¶

6·Division·of·Nuclear·Medicine,·Medical·University·of·Vienna,·Austria¶

¶

Key·words:·PET/MRI,·Brain·tumor·imaging,·attenuation·correction,·quantification¶

Total·words:·5213¶

Corresponding:¶

Tatjana·Traub-Weidinger¶

Waehringer·Guertel·18-20/3L;·1090·Vienna,·Austria¶

Email:·tatjana.traub-weidinger@meduniwien.ac.at;·tel.:·+43·1·40400·55310¶

ABSTRACT¶

Aim:·¶

To·compare·attenuation·correction·(AC)·approaches·for·positron·emission·tomography·(PET)/magnetic·resonance·imaging·(MRI)·in·clinical·neuro-oncology.¶

Methods:¶

Forty-nine·PET/MRI·brain·scans·were·included:·brain·tumor·imaging·using·[18F]-FET·(n=31)·and·68-Ga-DOTANOC·(n=7)·and·scans·of·healthy·subjects·using·[18F]-FDG·(n=11).·For·each·subject,·MR-based·AC·maps·(MR-AC)·were·acquired·using·the·standard·DIXON-·(DIXON)·and·UTE-based·(UTE)·approach.·A·third·MR-AC·was·calculated·using·a·model-based,·post-processing·approach·to·account·for·bone·attenuation·values·(BD,·non-commercial·prototype·

- Cover page (authors, key words, total word count, corresponding author address
- Plain text with double line spacing
- Tables, figures at the end

Things which can go wrong

COMMON MISTAKES FROM YOUNG WRITERS

- Describing methodology in the Results section
- Making the article too long:
  - Introduction too long.
  - Too many results.
  - Long and broad discussion.
- Not clearly defining the problem and the novel contributions.
- Conclusions too long and broad – Conclusions must be supported by results.
- Mixing past and present tenses
  - General rule: Established knowledge – Present
    Unpublished work or previous studies - Past

The reviews

- Read referees' reports and put away for a day!
- Read comments again!
- Respond to each and every comment specifically
- Keep a list of your changes
- Where you disagree, explain why, in a polite way.
- If a referee missed a point; take into account that you may not have explained it as clearly as you think
- Prepare a detailed **cover letter** with your response
- Be polite!
- Add a letter to the editor summarizing all major changes made.

The reviews

We thank the reviewers for their helpful comments, wh
version of our manuscript. We made also additional mi
clarity and readability; these changes did not affect the
changes in the manuscript are marked in red. ¶
¶

Reviewer 1 Comments for the Author...¶

The is a well-written paper aiming to clinically evaluat
imaging in neuro-oncology, which are well-known in tl
the human brain. The authors used three tracers (FET, (
scans for their assessment of these four vendor MR-AC
bone, UTE-based and BD with including bone in the A
reference. The authors calculated the SUV as well as v
tissues and close to the brain skull. They came to result
patients with brain tumors was not influenced by the A
found to be acceptable for UTE and BD. However, larg
for individual brain lesions with all MR-AC methods.¶

Notwithstanding, the authors should address and explain some major issues in the present study, as discussed in the following points.¶

1) → The authors should explain why they used different acquisition times for the three tracers?¶

We used 10 min emission acquisition times for all PET acquisitions of all subjects in all 3 groups (A-C). We have further clarified this in the text (p 7).¶

2) → The authors used two different filtering kernels (3 and 5mm) as well as two different thresholds of VOI (50 and 70%) for their evaluation. In my opinion, the different in filtering and thresholding can provide different results. With this way of evaluation, the authors cannot compare all AC-method fairly to each other. The authors must deliver a supporting statement, why they have decided to choose this kind of evaluation.¶

This is an important observation, and we do apologize for not having made the reasoning for the different settings more clear. All reconstruction settings and threshold choices were made from on-site clinical routine protocols. Moreover, we did use the same reconstruction settings and thresholding methods within each group (FET, DOTANOC and FDG). The comparison between the different MR-AC methods was done within the groups and, therefore, the inter-group differences in reconstruction settings have no influence on the comparison of the different AC methods. Further reasoning for the choice of the parameters is given below:¶

Filtering. We used 3 mm post-recon filtering for all brain tumor patients (A: FET and B: DOTANOC) as defined in our internal standard for these imaging protocols. The 5 mm for FDG-PET was chosen according to our internal standard for FDG brain imaging. A statement wrt the use of clinical routine protocols was added (p 9). We believe that the minimal differences in post-reconstruction filters for the comparison of the FET lesions to the results of the regional FDG analyses have no effect on the outcome as only mean values of regional differences are compared and a Gaussian filtering should not have an effect on the mean value.¶

A review consists of:

- General summary and reviewers opinion
- Specific issues to address

And finally…

- **If your paper is accepted:**

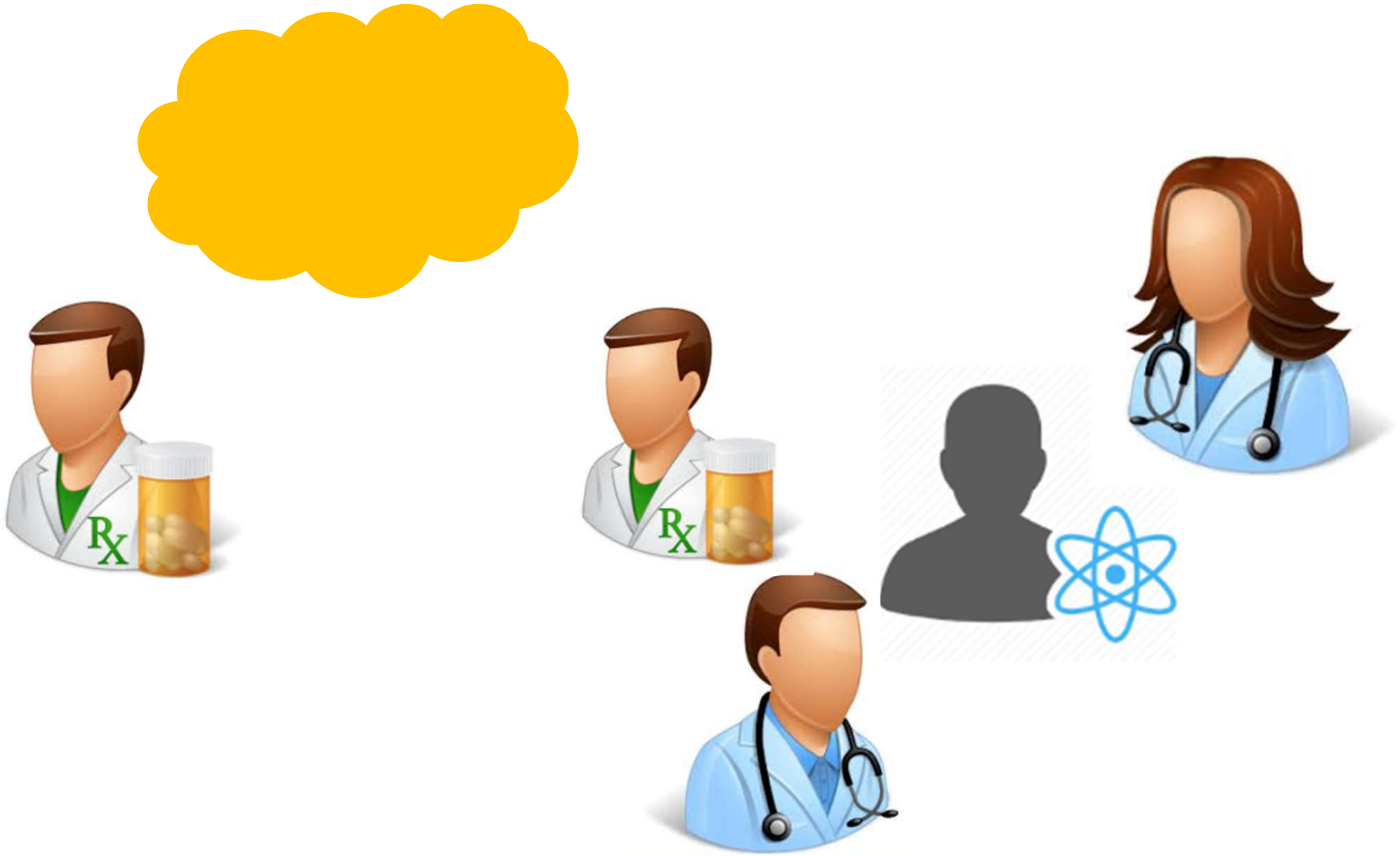
  GREAT!! CONGRATULATIONS!!

- **But if your paper is rejected:**

  - Do not despair: try to consider referees' comments as free expert advice.
  - You can re-write your article taking into account the suggestions of the referees and re-submit it (usually to another journal).
  - If you think the review was very unfair, send a letter to the journal and explain why you think your work did not receive a fair treatment.

Collaborations

Collaborations



Collaborations

- ❑ Define your goal / objective.
- ❑ Seek partners.
- ❑ Discuss scope / workload / funding …
- ❑ Be fair. Be supportive. Be efficient.

Collaborations

Industry

Formal collaboration agreement.

Timelines and milestones.

Payments and deliverables.

Collaborations

Industry

Formal collaboration agreement.

Timelines and milestones.

Payments and deliverables.

Academia

(Less) Formal collaboration agreement.

(Less strict) Timelines and milestones.

(No) Payments. (Fewer) deliverables.

Managing collaboration

- ❑ Stick to a timeline
- ❑ Communicate goals / obstacles / achievements
- ❑ Track progress and take minutes
- ❑ Act responsible. Lead and manage.

QIMP VIENNA

HYBRID

thomas.beyer@meduniwien.ac.at
ivo.rausch@meduniwien.ac.at

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