



RENE FRANZEN

Ph.D. (Medical Science)
Physicist

Curriculum Vitae

” Aiming to bring knowledge to people, and
join medicine and technologies to improve
human life and society.

“

Curriculum Vitae



Positions

10/2021 - present	Scientific Director AALZ GmbH (Aachen Dental Laser Center), Germany Postgraduate Teaching, Research, Curricular Development, e-Learning, Digitizing of Advanced Training Programs, Quality Management
7/2011 - 10/2021	Head of Preclinical Research and Education at AALZ GmbH (Aachen Dental Laser Center), Germany Postgraduate Teaching, Research, Curricular Development, e-Learning, Digitizing of Advanced Training Programs, Quality Management
7/2022 - present	Visiting Professor at MISR International University, Cairo, Egypt Basic Sciences
7/2011 - present	Visiting scientist at the University Hospital of the RWTH Aachen University, Germany Postgraduate Teaching, Research, Supervision and Co-Supervision of Master Theses and Ph.D. theses
3/2001 - 6/2011	Physicist at the University Hospital of the RWTH Aachen University, Germany Research (Lasers in Dental Applications), Laser Development, Curricular Development, Laser Safety
4/2000 - 2/2001	Physicist at the Institute for Laser Medicine, Düsseldorf University, Germany Research (Lasers in Medical Applications), Optical Technologies

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Date of birth
13th June 1973



Place of birth
Erkelenz, Germany



Nationality
German



92 scientific publications



41 conference talks



Hirsch-Index: 25

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Academia & Degrees

5/2017	Venia Legendi The „ Venia legendi “, or the German „ Priv.-Doz. “, degree, is considered equivalent to an Associate Professorship. Sometimes it is also referred to a „2nd Ph.D.“ degree. My field is Experimental Operative Dentistry, at the Medical Faculty of RWTH Aachen University, Germany
6/2008	Nominee for the Faculty Prize of Outstanding Young Lecturers German Society for Medical Education
12/2004	Nominee for the State Prize 2005 for Science Ministry of Science, Nordrhine-Westphalia, Germany
10/2004	Award: Faculty Prize for Outstanding Interdisciplinary Doctoral Thesis RWTH Aachen University, Medical Faculty
5/2003	Doctorate in Theoretical Medicine The German „ Dr. rer. medic. “ degree is commonly considered an Ph.D. degree. (Magna cum laude)
10/2004	Certified as Expert for Laser Safety, Problem-Based Learning, and Project Management Various RWTH Aachen University certifications
3/2000	Physicist The German „ Diplom-Physiker “ is commonly considered an master's degree (5 year curriculum plus 1 year research thesis)

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Interests

Virtual reality, hiking, geo-caching, artificial intelligence, young timers

Languages

German, English, French (B2-), Dutch (basic)

Curriculum Vitae



Strengths

Overall

Rapid perception of complex structures and facts

Examples of my work:

- Explaining complex topics such as laser-tissue interactions and laser technology to dentists with no prior experience
- Reviewer of scientific articles for several peer-reviewed journals

Optimization processes, special interest in artificial intelligence

Examples of my work: development „from scratch“ without preexisting software of a genetic algorithm to solve a complex engineering problem for a biotech company

Fast learner in foreign (non-physics, non-medical) fields of knowledge

Examples of my work:

- Founding a company, restructuring an old dental office into a new education center
- Conception, construction, installation and administration of content management systems

Quality

Quality management

Examples of my work: development, installation and administration of an e-Learning based quality management solution

Structured working and planning

Examples of my work:

- Development of a University-grade qualification curriculum for dental students.
- Involved in accreditation procedures in Germany and U.A.E. (with Ministry of Higher Education, Abu Dhabi).

Digitization

Modernizing business and education

- Administration of the e-Learning platform *ILIAS* for a postgraduate degree program of the RWTH Aachen University, Germany, in the postgraduate field.
- Organizing and planning of online lectures (*Zoom* platform) and live streams to social media

Social

High social skills

Examples of my work: conflict mediator for RWTH Aachen University students

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Skills & Competences

Goal oriented



Micromanaging



Resiliency



Critical thinking



Communication



Leadership



Time management



Future focused



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Boards & Memberships

since 5/2015	Scientific Advisory Board of the German Society for Laser Dentistry („DGL“)
7/2014 - 10/2018	Executive Board of the European Division of the World Federation for Laser Dentistry („WFLD“)
since 1/2005	Member of the German Society of Dental Oral and Craniomandibular Sciences („DGZMK“)
since 5/2001	Member of the German Society for Laser Dentistry („DGL“)
since 5/2001	Member of the World Federation for Laser Dentistry („WFLD“)
since 2/2022	Member of the International Society for Laser Dentistry („ISLD“)
4/2000 - 2010	Member of the German Physics Society („DPG“)
since 2021	Editorial Board of journal „Biomedicines“ (IF 6.081) / Guest Editor „Applied Sciences“ (IF 2.838)
since 2016	Editorial Board of journal „Lasers in Dental Science“ / Editorial Consultant „Lasers in Medical Sciences“ (IF 3.161)