

## **Education**

1974-77 high school diploma, Földesi Ferenc High School Miskolc, Hungary

1977-78 Medical School, Constantine, Algeria

1978-85 University of Debrecen Medical Health and Science Center, Hungary

## **Postgraduate education**

1991-93 DEA postgraduate training in Biomechanics and Biomaterials CHU Créteil, France

1994-99 Ph.D. research at the University of Debrecen Medical Health and Science Center, Hungary

2001-03 University of Debrecen, Health Management Postgraduate Training

## **Diplomas, specialties**

1985 Medical degree (cum laude)

1990 Orthopedic Surgery Specialty

2009 Traumatology Specialty

## **Scientific rank**

1993 Diploma d' Etudes Approfondies (DEA) en Biomécanique et Biomatériaux Paris, France  
(Accepted as a postgraduate degree by the Hungarian Ministry of Education.)

1999 Ph.D. received (summa cum laude)

2015 D.Sc.

## **Languages**

1979 French advanced state exam (Á-1115)

1998 English intermediate state exam (30418)

## **Prizes**

1999 Letter of Praise from the Rector for the work done in establishing the Biomechanics Laboratory.

2000 Genius Prize, II. Inventors Olympic Game, Budapest

2000 Sanatmetal Traumatology Prize 1st. Place.

2007 The Innovation Prize of the University of Debrecen

## **Workplaces**

1985-86 University of Debrecen Medical Health and Science Center, Hungary Department of Operative Techniques and Surgical Research.

1987- University of Debrecen Medical Health and Science Center, Hungary Department of Orthopedics.

### **Medical education**

1985-97 UDMHSC, Department of Operative Techniques and Surgical Research: taught basic surgical techniques practical to medical students.

UDMHSC, Department of Orthopaedics

orthopaedic practical for medical students in Hungarian

UDMHSC, Department of Orthopaedics

orthopaedic lectures for medical students in Hungarian

UDMHSC, Department of Orthopaedics

orthopaedic practical for medical students in English

UDMHSC, Department of Orthopedics

orthopaedic lectures for medical students in English

1999- UDMHSC, Department of Orthopaedics

conducting final exams for medical students in Hungarian

1999- UDMHSC, Department of Orthopaedics

conducting final exams for medical students in English

2000- UDMHSC, Department of Orthopedics

Hungarian and English elective courses for medical students

### **Medical college for physiotherapy**

Teach the subject of biomechanics for physiotherapy students, organize lectures and practicals, organize the lecture topics, write notes, and the final exam questions.

1999- 2 semesters, lectures, practicals

2000- Biomechanics end of semester exam

Thesis tutor and outside consultant: 7 students.

Ph.D. tutor: 4 students.

### **Research topics**

1982-86 University of Debrecen Medical Health and Science Center, Hungary Department of Operative Techniques and Surgical Research, research assistant.

topics

- The examination of a new surgical treatment of imitated kidney injury. (individual work)

- The experimental trial of suture materials. (Prof. Dr. Furka István's and Dr. Mikó Irén's workgroup)

- The intrahepatic inoculation of homogenized pancreas. (Prof. dr. Bornemisza Gergely's workgroup)

1987-93 University of Debrecen Medical Health and Science Center, Hungary Department of Orthopaedics, clinical assistant

topics

- From the beginning I was interested in biomechanical problems.

1993-94 UDMHSC, Department of Orthopaedic Surgery and UD, Ybl Miklós Technical Collage collaborately functioning Biomechanical Laboratory planning and development.

1995 UD, Biomechanics Laboratory: The planning of the work and research program.

1996 The development, testing, patenting, and first clinical use (3 cases) of the spine implant (CAB) invented by me.

1997 Collaboration with the clinical (Prof. George Bentley) and biomechanical (Prof. Allen Goodship) head of the Royal National Orthopaedic Hospital, Institute of Orthopedics, Stanmore, London.

1999 Ph.D. received at UDMHSC (The development of a new spine implant the "CAB" for posterior approach surgery of scoliosis.)

1999- The building of a new biomechanics laboratory which has one engineer and one medical doctor head supervisor, the later one is fulfilled by me from the beginning.

topics

- The biomechanics of the hip joint (hip dysplasia a biomechanical possibilities of surgical correction).
- Introduction of material analysis in the biomechanics laboratory (according to FDA, EU, and Hungarian norms).
- Basic research in spine surgery innovation (scoliosis etiology and pathogenesis).
- The mechanical and functional examination of the spine.
- The development of spine implants, surgical techniques, operating tables, and instruments.
- The mechanical clinical and allergy examination of bone cement.
- The development of revision hip arthroplasty implants, and instruments.
- The development and clinical testing of musculoskeletal rehabilitation aids.

## **Grants**

Cumulative scholarship total 331,117 M HUF.

First author scholarship total 227,086 M HUF.

## **Leaderships**

1993- UD, Biomechanics Laboratory head supervisor.

1999- head of the UDMHSC, Department of Orthopaedics spine surgery team.

2003- head of the UDMHSC, Department of Orthopaedics.

2005-2006 UD, Faculty of Health College in Physiotherapy, consulting supervisor

University functions

Permanent university functions

1997-99 UDMHSC, Committee Member

2000- UDMHSC, Innovation Committee Member

2003- UDMHSC, Committee Member

2003- UDMHSC, Leadership Committee Member

2003- UDMHSC, Clinical Committee Member

2004- UDMHSC, Scholarship Committee Member

2007- UDMHSC, Foreign Affairs Board Member

2007- UDMHSC, Clinical Ethics Board Member

## **Professional functions**

2005- Supervising Orthopedics doctor for the Hungarian Northern Plains Region

2006- The President of the Hungarian Biomechanics Association

## **College memberships**

2003- Orthopaedic College

Society Memberships

1987- Hungarian Orthopaedic Association

1993-96 Groupe Spine System, France

1996- Hungarian Spine Association

1997- The Sir Herbert Seddon Society, London

2000- Hungarian Inventors Society

2000- The Internet Society of Orthopaedic Surgery and Trauma

2000- Société Française de Chirurgie Orthopédique et Traumatologique (SOFCOT)

2001- Hungarian Traumatology Association

2002- Hungarian Academy of Sciences

2002- Société Internationale de la Chirurgie Orthopédique et de la Traumatologie (SICOT)

2002- Hungarian Sport Academy Association

2004- Hungarian Orthopaedic Association Leading Member

2004- Hungarian Biomechanics Association

## **Publications**

98 scientific publications

28 abstract

Impact factor: 29.272

Total citations: 309

Independent citations: 222

19 book chapters, 225 lectures, 11 posters

Owner of 13 patents

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Grants

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First author scholarship total 79,161 M HUF.

Leaderships

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2001- Hungarian Traumatology Association  
2002- Hungarian Academy of Sciences  
2002- Société Internationale de la Chirurgie Orthopédique et de la Traumatologie (SICOT)  
2002- Hungarian Sport Academy Association  
2004- Hungarian Orthopaedic Association Leading Member  
2004- Hungarian Biomechanics Association

Publications

57 articles, impact factor: 14,172  
9 book chapters, 103 lectures, 10 posters

Owner of 11 patents