

## **Personal information form for Fellow members of EAMBES**

### **Personal Info**



**Name:** Damijan Miklavčič

**Year and place of birth:** 1963; Slovenia

**Present affiliations and functions:** Professor, Department of Biomedical Engineering, University of Ljubljana, Faculty of Electrical Engineering; Ljubljana, Slovenia

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### **Short CV**

#### **1. Education/training:**

1987	B.S. Electrical Engineering (University of Ljubljana)
1991	M.S. Electrical Engineering (University of Ljubljana)
1993	Ph.D. Electrical Engineering (University of Ljubljana)

#### **2. Professional affiliations**

1993-present	Faculty of Electrical Engineering, University of Ljubljana
1993-1994	Associate Researcher
1994-1997	Assistant Professor
1995-1996	Visiting researcher at the Institute Gustave Roussy, Villejuif, France
1997-2002	Associate Professor
1998-present	Head of the Laboratory of Biocybernetics
2002-present	Full Professor
2003-2005	Vice-Dean for Research
2007-2015	Chair of the Department of Biomedical Engineering

### 3. Other experience and major activities

2009–present Member of the Council of the Bioelectrochemical Society  
2007–present President of the Slovenian Society for Engineering in  
Medicine and Biology  
2005–2007 Associate Editor of *Bioelectromagnetics* (2005–2007)  
2002–2014 Associate Editor of *IEEE Transactions on Biomedical Engineering*  
2004–2013 Associate Editor of *IEEE Transactions on Nanobioscience*  
2010–2013 Member of the Council of Science and Technology of the Republic  
of Slovenia  
Referee for over 50 SCI-indexed journals

### 4. Major scientific interest

His research is focused on electroporation-based gene transfer and drug delivery in medicine, use of electroporation in food engineering and biotechnology processes, development of electronic hardware, and numerical modeling of biological processes on different levels from molecular, membrane, cell to tissue level in relation to electroporation.

#### *Fields of research interest*

- Cancer treatment by means of electrochemotherapy and nonthermal irreversible electroporation
- Gene electrotransfer for gene therapy and DNA vaccination
- Numerical modeling of electric field distribution during electroporation with the aim to develop treatment planning

### 5. Bibliographical Data

Prof. Miklavcic has authored or co-authored over 900 papers, including over 240 original articles published in peer reviewed scientific journals. His works have been cited over 5792 (WoS), 7184 (Scopus). (without self citations). Hindex: 35 (Sources: WoS, Scis databases 9.5.2015). Patents: 4.

### 6. Four references to papers you find most important and relevant

1. Kranjc M, Markelc B, Bajd F, Čemažar M, Serša I, Blagus T, Miklavčič D. In situ monitoring of electric field distribution in mouse tumor during electroporation. *Radiology* 274: 115-123, 2015.
2. Miklavčič D, Mali B, Kos B, Heller R, Serša G. Electrochemotherapy: from the drawing board into medical practice. *Biomed. Eng. Online* 13: 29, 2014.
3. Miklavčič D, Snoj M, Županič A, Kos B, Čemažar M, Kropivnik M, Bračko M, Pečnik T, Gadžijev E, Serša G. Towards treatment planning and treatment of deep-seated solid tumors by electrochemotherapy. *Biomed. Eng. Online* 9: 10, 2010.
4. Miklavčič D, Šemrov D, Mekid H, Mir LM. A validated model of in vivo electric field distribution in tissues for electrochemotherapy and for DNA electrotransfer for gene therapy. *Biochim. Biophys. Acta* 1523: 73-83, 2000.

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**Recognitions:**

***Honors and awards***

- 1986 Preseren Award for Students, University of Ljubljana
  - 1989 International Award of the Maphre Foundation (Spain)
  - 1993 National Industrial Award of Krka Pharmaceuticals
  - 1995 Award of the Republic of Slovenia for Scientific and Research Achievements
  - 2003 Ambassador of the Republic of Slovenia in Science
  - 2008 Vodovnik Prize for Exceptional Research
  - 2008 Knight of the Order of Academic Palms of the French Republic
  - 2012 IFMBE Vladimir Zworykin Award
  - 2012 Rector's Award for Innovations of the University of Ljubljana - 1st Prize
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