Edgar W. Delgado-Eckert
Adjunct Professor and Research Group Leader In Computational Physiology,
Biomathematics and Biostatistics
Department of Biomedical Engineering
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University Of Basel
Basel, Switzerland

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Education

December 2021
Postdoctoral university lecturing qualification (Habilitation)
University of Basel, Switzerland

July 2008 – October 2011
Postdoctoral Researcher
Department of Biosystems Science and Engineering (BSSE),
Swiss Federal Institute of Technology (ETH Zürich).

May 2008
Ph.D. (Bio-)Mathematics (Magna Cum Laude), Technische Universität München, Germany, Tufts University, Boston, USA. PhD supervisors: Prof. Dr. R. Lasser, Prof. Dr. D. Thorley-Lawson, and Dr. Michael Shapiro.
Major: Mathematics.
Minor: Biology.

2002
M.S. Mathematics (German Diplom-Mathematiker Univ.), Technische Universität München, Germany. Major: Mathematics. Minor: Physics.

Employment History

Since December 2021 **Adjunct professor (Privatdozent)**, Department of Biomedical Engineering, Faculty of Medicine, *University of Basel*, Basel, Switzerland.

Since 2018 **Lecturer (adjunct professor** since December 2021), Department of Biomedical Engineering, Faculty of Medicine, *University of Basel*, Basel, Switzerland.

Since 2011 **Research group leader**, University Children's Hospital, *University of Basel*.

October 2013 – January 2017 **Marie Curie Research Fellow**, Department of Applied Mathematics, School of Mathematics, and Endothelial Cell Biology Unit, School of Molecular & Cellular Biology at *University of Leeds*, Leeds, United Kingdom.

July 2008 – October 2011 **Postdoctoral Researcher**, BSSE, *ETH Zürich*, Switzerland.

August 2006 – January 2008 **Graduate Research Assistant**, Pathology Department, *Tufts University*, Boston, USA.

October 2004 – July 2006 **Research Fellow**, *Virginia Bioinformatics Institute at Virginia Tech*, Virginia, USA.

January 2003 – December 2003 **Research Associate**, Institute for Product Development, Department of Mechanical Engineering, *Technische Universität München*, Munich, Germany.

Institutional responsibilities

- Research grant application writing.
- Research project planning and management.
- Drafting of educational program.
- Teaching and examination.
- Supervision of bachelor, master, PhD students, and postdoctoral researchers.
- Recruitment of academic and research personnel.
- Management of computational resources (hardware and software) and of research data storage (hardware and software).

Research Experience

November 2011 – Present
Research group leader, University Children's Hospital, *University of Basel*, Switzerland.

October 2013 – January 2017
Marie Curie Research Fellow, School of Mathematics and School of Molecular & Cellular Biology at *University of Leeds*, Leeds, United Kingdom.

July 2008 – October 2011
Postdoctoral Fellow, Department of Biosystems Science and Engineering (BSSE), *ETH Zürich,* Switzerland.

August 2006 – January 2008
Graduate Research Assistant, Pathology Department, *Tufts University*, Boston, USA.

October 2004 – July 2006
Research Fellow, Virginia Bioinformatics Institute at *Virginia Tech*, Virginia, USA.

August 2003 – December 2003
Research Associate, Institute for Product Development, Department of Mechanical Engineering at *Technische Universität München*, Germany.

Teaching Experience

Since Fall semester 2018
Lecturer at University of Basel
Mathematics for Biomedical Engineering

Fall Semester 2012/2013
Lecturer at School for Life Sciences, University of Applied Sciences and Arts Northwestern Switzerland (FHNW), Basel.
Ordinary Differential Equations for Engineers.

Spring 2009, Spring 2010, Spring 2011
Teaching Assistant at BSSE, ETH Zürich
Statistical models in computational biology (with Prof. Niko Beerenwinkel).

Spring 2010, Fall 2010
Teaching Assistant, tutor, and supervisor of PhD student at BSSE, ETH Zürich.
Systems Biology (with Prof. Dr. Niko Beerenwinkel and Prof. Dr. Renato Paro)

Fall 1997, Summer 1998
Teaching Assistant at Center for Mathematical Sciences, Technische Universität München, Germany.
Linear algebra and calculus.

Awards and Fellowships

2013: **Marie Curie Intra-European Fellowship** for Career Development (IEF), European Research Council, 209'033.40 EUR.

2012/2013: **Promotional grant for junior scientists from the University of Basel**, 45000 CHF.

2010 and 2011: **Travel award** of the European Society for Mathematical and Theoretical Biology and **Landahl travel award** of the Society for Mathematical Biology.

2003 – 2006: **Graduate research fellowship** from the Bavarian State, Germany.

Editorial Work and Scientific Reviewing

Guest Editor at the *International Journal of Environmental Research and Public Health*.

Reviewer for Swiss National Science Foundation, Thorax, PNAS, Journal of Applied Physiology, BMC Pediatrics, Mathematical Foundations of Computer Science, Automatica, Journal of Difference Equations and Applications, Journal of the Royal Society Interface, Bulletin of Mathematical Biology, AJP: Gastrointestinal and Liver Physiology, PLoS ONE.

Professional Memberships

- European Society for Mathematical and Theoretical Biology.
- Society for Mathematical Biology.

Programming Skills

- Python
- Matlab®
- R

Additional Training

Leading & Managing in the New Academic Environment: Building & Developing a Positive Team Environment. Staff and Departmental Development Unit (SDDU), University of Leeds, 2015.

Leading & Managing in the New Academic Environment: Managing Sources of Conflict & Difficult Situations. SDDU, University of Leeds, 2015.

Effective Research Student Supervision in Science, Engineering and medically-related disciplines. SDDU, University of Leeds, 2014.

Ethics and Ethical Review. SDDU, University of Leeds, 2014.

Personal Impact and Confident Networking. SDDU, University of Leeds, 2014.

Work and time management. ETH Zurich, Fall Semester 2009.

Summer School in Mathematical Biology (Park City Mathematics Institute 2005, Utah) under the auspices of the Institute for Advanced Study, Princeton University.

University Service

Fall Semester 2005/6, Spring Semester 2006
Vice-president of the Student Chapter of the **Society of Industrial and Applied Mathematics (SIAM)** at Virginia Tech, Virginia, USA.

Languages

- **English:** Fluent.
- **German:** Fluent.
- **Spanish:** Fluent.
- **French:** Basics.