

Michèl Schummer

Web Development, Teaching, Database Programming, Cancer Biology
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Objective

I have over 20 years of experience in web development, teaching, cancer biology as well as database development and administration. I am seeking a challenge where I can combine my experience in any of these fields with my language skills, potentially working abroad and/or with disadvantaged communities.

Web Development

I created my first web page in 1995, when the web was mostly text-based and used predominantly for dissemination of academic information. This was followed by several other small sites at universities and for small non-profit organizations, which were mainly created in a text editor with the occasional help from Netscape, Claris Home Page and Dreamweaver. Since 2017 I use responsive design tools. The following web sites are currently online:

- 2018-today **aku GmbH**: Consulting company. Created using Mobirise, PHP and code editing.
- 2016-today **Haus Ahorn**: Guest house. Created using Mobirise and code editing.
- 2005-2009 **Red Chaussee**: A now-defunct band. Initially created in Netscape and maintained through text editor.
- 2002-today **Freunde Ugandas e.V.**: Non-profit organization. Initially created in iWeb and re-created in Mobirise for responsive design.

Teaching

My teaching focuses on the student, their specific needs, their experiences and their immediate goals. If I am teaching a student whose French is acceptable but his confidence is low, I might start cooking with her while making her talk with me. If I teach science, it includes the principles of gaining knowledge and how they can be used universally while performing hands-on work. I applied these principles to high school students as well as to my university staff. I strive to instill curiosity in my students and boost independent thinking. I have been teaching for 24 years:

- 2007-today **Language tutoring**, French, German, Spanish, Arabic.
- 2005-2006 **Supervision of a post-doctoral fellow**, Fred Hutch, Seattle.
- 1998-2003 **Instructor** at the Institute for Science Training and Research in Seattle, teaching adults about newly emerging biotechnology tools and their applications.
- 1998-2001 **Teaching introductory courses** at Garfield High School in Seattle.
- 1997-2015 **Supervision of student interns**, University of Washington, Institute for Systems Biology and Fred Hutch, all in Seattle.
- 1997-2001 **Participant in the Outreach Program** at University of Washington and later the Institute for Systems Biology in Seattle, working in family science.
- 1995-1999 **Summer Student Program** for students from disadvantaged families at the University of Washington, Seattle.

Database Programming

I design databases from the user's perspective. My databases start small and tailored to a specific project. Those with continued usefulness are redesigned for a larger user base and eventually morph into more conventional databases. During the design process I choose to be close to the user and watch them interact with the interface. This in turn allows me to change interface elements on the fly to accommodate the habitual workflow of an individual or a group. I have been programming databases for 27 years:

- 2010-now **FileMaker Go:** Expanding existing solutions for access on iPhone and iPad (and the web interface on Android devices), such as databases for specimen inventory with barcode scanning; expenses for data entry at the time of payment; scheduling and invoicing for small medical practices.
- 1999-now **FileMaker Server:** Porting existing databases to server-based solutions for access throughout and outside an organization. These include: biorepository management for 400 000 specimens from 6000 patients; gene and protein expression management; invoicing of specimens; laboratory results tracking.
- 1997-now **FileMaker Pro:** Professional ad-hoc solutions for laboratory personnel, including databases for oligonucleotides, tissue sources and DNA microarray data.
- 1993-1994 **MS Access:** Adaptation of existing contacts databases for ease-of-use in public relation offices (DKFZ Heidelberg).

Cancer Biology

I have received formal training in molecular genetics, which I applied to cancer biomarkers and to the generation of tools that benefit the discoveries. During my career, I progressed from bench scientist to manager while taking on additional responsibilities including a clinical marker laboratory and a specimen repository. I wrote and co-wrote 42 successfully funded grant proposals and I authored 30 research papers. My professional scientific career spans 16 years:

- 2016 **Consultant for Biotechnology Companies and Academic Institutions:** Cancer biomarkers, management of databases, specimen repositories.
- 2005-2015 **Staff Scientist, Fred Hutch, Seattle:** Management of blood assay development, a CLIA-certified marker testing laboratory and a specimen repository. Creation and management of databases, supervision of research projects and personnel, writing of grant proposals, reports and publications; liaison between bench scientists and clinical personnel at Swedish Medical Center in Seattle.
- 2001-2005 **Scientist 2, MacroGenics Inc. Rockville, Maryland:** Development of cancer biomarkers using mass spectrometry and DNA tools; management of company IT infrastructure; creation and administration of research-specific databases; writing of small business grant proposals.
- 2000-2001 **Senior Scientist, Institute for Systems Biology, Seattle:** Supervision of research projects and personnel for ovarian cancer biomarker discovery; writing of grant proposals, reports and publications.
- 1998-1999 **Research Associate, University of Washington, Seattle, Washington:** Discovery of a blood-based marker for the early detection of ovarian cancer, which is now used clinically.

Educational Background

- 1995-1998 **Postdoctoral Fellow**, Department of Molecular Biotechnology, University of Washington, Seattle: Ovarian cancer biomarker development; invention and licensing of a device for generating DNA microarrays.
- 1995 **Trainee**, Public Relations, German Cancer Research Center, Heidelberg, Germany: Creation of a contacts database; author for a scientific magazine.
- 1994 **Trainee**, Public Relations Office, German Cancer Society, Frankfurt/Main, Germany: Management of a contacts database; manning a telephone hotline.
- 1994 **PhD in Molecular Biology**, University of Heidelberg, Germany.
- 1993-1994 **Visiting Scientist**, Department of Zoology, University of Geneva, Switzerland.
- 1991-1993 **Research Associate**, Center of Molecular Neurobiology, University of Hamburg, Germany.
- 1991-1994 **Graduate Student**, Center for Molecular Biology, University of Heidelberg, Germany.
- 1991 **Diploma in Biology**, University of Heidelberg, Germany.
- 1989 **Research Student**, Weizmann Institute of Science, Rehovot, Israel.
- 1988-1991 **Research Associate**, Center for Molecular Biology, Heidelberg, Germany.
- 1986-1988 **Research Student**, Department of Biology, University of Heidelberg, Germany.

Publications, Books, Presentations, Patents and Inventions

A list of my 30 publications in peer-reviewed journals, book chapters and invited talks, as well as one patent and one invention is available upon request.

Languages

Fluent in English, French and German. Reading and simple conversations in Spanish, Italian and Arabic. Reading and basic understanding of Dutch, Portuguese, Modern Greek and Modern Hebrew. Familiarity with Hungarian, Serbian, Chinese and Danish.

Other

- 2018-2019 Active in Seattle Greenways for a bicycle-safe Seattle.
- 2017 Weekend barista at a high-end French pâtisserie in Seattle.
- 2000-2015 Performances (voice and guitar) in small local venues in the Seattle area.
- 2005-2019 Financial officer of my condominium association in Seattle.
- 1995-2019 Member of a developmental aid association and microbank benefitting women in Uganda.
- 1992-2012 Member of a charitable organization benefitting people with AIDS (Mannheim and Seattle).
- 1987-1989 Founder and Editor-in-Chief, Student Newspaper Ruprecht (formerly "Schlagloch"), University of Heidelberg, Germany.