

# Curriculum Vitae

**Dr Bruno Senger – PhD, 57 years**

## *Professional Information*

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## *Positions and Employment*

1999 - present	Research scientist employed by the CNRS (National Center for Scientific Research in France)
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## *Education and Training*

2006	Habilitation to Direct Research, University of Strasbourg.
1996 - 1999	Postdoctoral Research Fellow, Biochemie Zentrum Heidelberg, Heidelberg University. Adviser Professor Ed Hurt.
1992 - 1996	Doctor of Philosophy, University Louis Pasteur of Strasbourg France. Supervisor Dr F. Fasiolo
1986 – 1991	University Education

## *Distinctions and Honors*

2002	Bronze Medal from the CNRS
1996 - 1999	Alexander von Humboldt Long-Term Fellow, Biochemie Zentrum Heidelberg, Heidelberg University. Adviser Professor Ed Hurt.
1992 – 1996	Thesis Prize from ADRERUS (Association pour le Développement des Relations entre l'Economie et la Recherche) Doctoral grant from the French Ministry of Education, Research and Technology, France.

## *Students and Trainees*

2006 - present	PhD Supervisor of 4 Doctoral Students
1999 - present	Thesis Advisor of 14 Master Students and numerous short term trainees

### **Brief career timeline description**

It took 5 years, from 1986 to 1991 to obtain a Master degree at the University of Strasbourg (3 years for the license and 2 years for the Master). Then, to do my PhD (1992-1996), I obtained a grant from the French Ministry of Education and a one-year position at the University of Strasbourg (ATER). During my thesis, I worked on the recognition between tRNAs and aminoacyl-tRNA synthetases (aaRS) in the group headed by Dr Franco Fasiolo at the IBMC (UPR9002) on the central campus of the University of Strasbourg. This allowed me to become very familiar with numerous techniques to study RNA/protein recognition (enzymology, structural analyses, *in vitro* and *in vivo* approaches). During the time course of my thesis, our group was contacted by the group headed by Pr Ed Hurt (University of Heidelberg) since they discovered the Arc1 protein that interacts with two aaRS. This group was mainly interested in nucleocytoplasmic shuttling and I went there for a post-doctoral training (1996-1999) to extend my knowledge to yeast genetic and biological tools not on Arc1 but on Mtr10, a factor involved in nuclear import of proteins and tRNA. Then I was recruited by the CNRS (IBMC/UPR9002) in the team of Dr F. Fasiolo to work on aspects related to 60S ribosomal subunit biogenesis and it allowed me to use knowledge and techniques acquired during my PhD and post-doc. Always being interested by some aspects related to translational apparatus (tRNA, aaRS, ribosome), I used my unique combination of knowledge to start, together with a friend (who became Pr Hubert Becker our actual team leader), a side project (started in 2005) that led me to change research group inside UPR 9002. Through the completion of this project, we became interested in the Arc1 complex for its non-canonical function in mitochondrial respiration in yeast. This project was the starting point for us to create a new protein localization tool and to be interested in the dynamics and plasticity (in terms of functions) of aaRS. We teamed up and joined UMR7156 in 2011 because of research interest and facilities in this unit. A few years later, our research interest in non-canonical functions / localizations of aaRS also gained the human opportunistic pathogen *Aspergillus fumigatus* in which we identified an ergosterol modification pathway that uses aminoacyl-tRNAs as aminoacid donor.

### **Teaching experience**

- 1992-1996 : practical and theoretical courses for first and second year students of the University of Strasbourg
- 2006 - 2010 : Several plenary lectures concerning methods and principles in study of macromolecular complexes (protein/protein or protein/nucleic acid)
- 2009-2011 : training on protein purification techniques for non-academic persons
- 2006 – present : participation in MASTER degree jury and doctoral school selection committee of PhD students.

### **Common responsibilities**

- 1999 – 2011 : restriction modification enzymes stock manager for the UPR9002
- 2011-present : Radioprotection Officer for UMR7156

### **Extramural fundings**

2000 : starting grant from the University of Strasbourg to B. Senger

Below are fundings to which I participated (PI : Pr H. Becker)

2020-2023: ANR N-FLAMS – 304 k€

2021-2028: LABEX, Investissement d’Avenir, MitoCross renewed (P.I. I. Tarassov) ~800 k€ for H. Becker team

2006-2021: Completed ~1500 k€ (FRM, Polonium, LabEx MitoCross, JST-CNRS, ANR MITOMOT)

2025-2029: ANR BATT-MAN

**Publications – 37 - h index: 21, 2234 citations (Google Scholar)**