

Sound to Sense: 18 Fellowships in speech research

Sound to Sense (S2S) is a Marie Curie Research Training Network involving collaborative speech research amongst 13 universities in 10 countries. 18 Training Fellowships are available, of which 12 are predoctoral and 6 postdoctoral (or equivalent experience). Most but not all are planned to start in September or October 2007.

A research training network's primary aim is to support and train young researchers in professional and inter-disciplinary scientific skills that will equip them for careers in research. See

General Information: http://ec.europa.eu/research/fp6/mariecurie-actions/indexhtm_en.html

European Researcher's Mobility Portal: http://europa.eu.int/eracareers/index_en.cfm

Cordis (EC) website about S2S:

http://cordis.europa.eu/mc-opportunities/index.cfm?fuseaction=dataForm.showDataDetail&obj_id=12728&obj_type=PRJ

S2S's scientific focus is on cross-disciplinary methods for modelling speech recognition by humans and machines. Distinctive aspects of our approach include emphasis on richly-informed phonetic models that emphasize communicative function of utterances, multilingual databases, multiple time domain analyses, hybrid episodic-abstract computational models, and applications and testing in adverse listening conditions and foreign language learning.

There are opportunities for 12 Early Stage Researchers (ESRs) and 6 Experienced Researchers (ERs). Most ESR appointments are for 36 months; ER appointments vary between 14 and 36 months. Early Stage Researchers have less than 4 years' experience in postgraduate research since gaining the diploma/degree that qualifies them for doctoral studies, and they may work towards PhD degrees. Experienced Researchers have a PhD, or 4-10 years' experience in research.

Successful applicants will normally have a degree in psychology, computer science, engineering, linguistics, phonetics, or related disciplines, and want to acquire expertise in one or more of the others. You should want to contribute actively to the overall training and scientific aims of the network, be willing to be based in a country of which you are not a national, and to work in at least one other country for up to 30% of the duration of your appointment. (Generous provision for language lessons, relocation expenses and support in other practical matters, including for families, is part of the package.) Applications are open to all nationalities, although 70% of the positions are reserved for nationals and residents of the European Union and its associated states. (An individual who has resided in a member state or associated country for more than 4 years immediately prior to appointment is regarded as a resident.) We especially encourage applications from women and minorities; every effort will be made to appoint at least 40% women.

Eleven projects are planned. Each can be flexibly tailored to match the Fellows' backgrounds, research interests, and professional development needs, and will fall into one of four broad themes.

- 1: Multilinguistic and comparative research on Fine Phonetic Detail (4 projects)
- 2: Imperfect knowledge/imperfect signal (2 projects)
- 3: Beyond short units of speech (2 projects)
- 4: Exemplars and abstraction (3 projects)

The institutions and senior scientists involved with S2S are as follows:

- * University of Cambridge, UK (S. Hawkins (Coordinator), M. Ford, M. Miozzo, D. Norris, B. Post)
- * Katholieke Universiteit, Leuven, Belgium (D. Van Compernelle, H. Van Hamme, K. Demuynck)
- * Charles University, Prague, Czech Republic (Z. Palková, T. Duběda, J. Volín)
- * University of Provence, Aix-en-Provence, France (N. Nguyen, M. d'Imperio, C. Meunier)
- * University Federico II, Naples, Italy (F. Cutugno, A. Corazza)
- * Radboud University, Nijmegen, The Netherlands (L. ten Bosch, H. Baayen, M. Ernestus, C. Gussenhoven, H. Strik)
- * Norwegian University of Science and Technology (NTNU), Trondheim, Norway (W. van Dommelen, M. Johnsen, J. Koreman, T. Svendsen)
- * Technical University of Cluj-Napoca, Romania (M. Giurgiu)
- * University of the Basque Country, Vitoria, Spain (M-L. Garcia Lecumberri, J. Cenoz)
- * University of Geneva, Switzerland (U. Frauenfelder)
- * University of Bristol, UK (S. Mattys, J. Bowers)
- * University of Sheffield, UK (M. Cooke, J. Barker, G. Brown, S. Howard, R. Moore, B. Wells)
- * University of York, UK. (R. Ogden, G. Gaskell, J. Local)

Summary information about the Projects

Theme Project number & title		Coordinators	Probable host institution (Fellows, person-months)
I. Multi-linguistic & comparative research on FPD		Baayen, Mattys, Ogden	
1	Corpora for discovering language-specific and language-general patterns of FPD	Baayen, Mattys, Local	Charles U, Prague (ER, 22) U. York/Sheffield (ESR, 36) NTNU Trondheim (ESR, 36)
2	Automatic methods to identify FPD: Corpus-based probabilistic work	Baayen, Svendsen	Radboud U, Nijmegen (ESR, 36)
3	Perceptual salience of FPD 1: Segmentation of speech into words and phrases	Ernestus, Hawkins, Mattys	U Bristol (ESR, 36)
4	Perceptual salience of FPD 2: Cross-linguistic contextual sensitivity	Gaskell, Nguyen	CNRS/U Provence, Aix/U Geneva (ER, 20) U York (ER, 14)
II. Imperfect knowledge/signal		Cooke, Lecumberri	
5	Perceptual coherence and the role of FPD in noise	Cooke, Hawkins	U Sheffield (ESR, 36) UTCN, Cluj (ESR, 36)
6	Low-level processing in L2 speech perception	Lecumberri, Giurgiu	Basque Country (ESR, 36) Charles U, Prague (ER, 12)
III. Beyond short units of speech		Cutugno, Post	
7	Integration of multiple units in computational models	Cutugno, ten Bosch, Barker	U Naples (ESR, 36)
8	Prosodic structure and FPD: segmental-suprasegmental interaction	Palková, Post, Nguyen	CNRS/U Provence, Aix (ESR, 36) U Cambridge (ESR, 36)
IV. Exemplars and abstraction		Van Compernelle, Hawkins, Moore	
9	Hybrid episodic-abstract computational modelling: machines	Van Compernelle, Moore	Katholieke U, Leuven (ER, 34)
10	Hybrid episodic-abstract computational modelling: humans	Norris, Ogden, Hawkins	U Cambridge (ESR, 36)
11	Lexical decoding of speech using sub-phonemic features: machines	ten Bosch, Moore	Radboud U, Nijmegen (ER, 22)

For more information about the research projects click [here](#). For more information about administrative matters, contact the Coordinator's assistant, Naomi Hilton: nrh25@cam.ac.uk.

Applications (Curriculum Vitae including nationality and residence, 2 references, statement of interests, and an indication of which project(s) you are applying for) should be submitted electronically, preferably in pdf format, to the Coordinator's assistant:

Naomi Hilton, nrh25@cam.ac.uk

Deadlines. There is no deadline for applications, but applications received by 1st May 2007 will be considered by mid-May. Interviews for positions beginning in September or October 2007 will take place in person or by telephone from the middle of May. Positions will remain open until suitable applicants are found.