

Call for Ph.D. applications 2019

RNA Folding Dynamics group

“ When I talk to students about what kind of a lab they should join, I always tell them that it's a very special experience to go into the laboratory of someone who is just beginning an independent research career, because the principal investigator is in the lab all the time working shoulder to shoulder with them. There is a lot of excitement and anticipation about exactly which direction the laboratory will go. ”

- Thomas Cech, HHMI
Nobel Prize in Chemistry (1989)

Applications are invited for two 4-year Ph.D. studentships, starting April 2019, in the newly established research group of Dr. Danny Incarnato (embedded in the department of Molecular Genetics, headed by Prof. Dr. Oscar Kuipers) at the University of Groningen (the Netherlands), to study *in vivo* RNA folding dynamics.

What

The successful applicants will work on a multidisciplinary project aimed at understanding the mechanistic aspects underlying *in vivo* RNA structure formation. Particularly, they will:

- study the role of different factors, such as macromolecular crowding, RNA binding proteins (RBPs) and RNA post-transcriptional modifications (PTMs), in regulating RNA folding (and their crosstalk)
- develop novel approaches for the accurate interrogation on a transcriptome-wide scale of RNA structures and PTMs
- integrate the *wet-lab* work with a substantial component of bioinformatics analyses (developing novel analysis tools where needed)

Ph.D. candidates will receive excellent training through cutting-edge research projects, advanced courses and training opportunities, complemented by workshops on generic research, transferable skills and teaching. Ph.D. candidates are committed to conduct independent and original scientific research, to report on this research in international publications and presentations, and to present the results of the research in a Ph.D. dissertation, to be completed within 4 years. Moreover, Ph.D. candidates are expected to contribute 10% of their overall workload to teaching.

Who

The ideal candidates must be highly motivated, hard-working, ambitious, creative, really enthusiastic about RNA and interested in doing both *wet-lab* and bioinformatics. They must hold a Diploma or Master's degree in the field of life sciences (molecular biology, biochemistry, or related disciplines) and have at least 6 months of lab experience (ideally with a focus on RNA biology and/or Next-Generation Sequencing). Strong communication skills and the ability to work efficiently, independently as well as in a team, are required. An excellent written and oral fluency in English is essential. Prior knowledge of UNIX/Linux computing environments and of a programming language (Perl, Python, Ruby, C++) is not required but is a plus.

How

Our lab uses both prokaryotic and eukaryotic cellular models and exploits (or develops where needed) cutting-edge Next-Generation Sequencing approaches (Incarnato *et al.*, 2017 [PMID: 28934475]; Incarnato *et al.*, 2017 [PMID: 28180324]; Incarnato *et al.*, 2014 [PMID: 25323333]) and bioinformatics analysis tools (Incarnato *et al.*, 2018 [PMID: 29893890]; Incarnato *et al.*, 2016 [PMID: 26487736]; Incarnato *et al.*, 2013 [PMID: 23863844]), complemented by traditional molecular genetics and biochemistry techniques.

Where

Founded in 1614, the University of Groningen enjoys an international reputation as a dynamic and innovative center of higher education offering high-quality teaching and research. Flexible study programmes and academic career opportunities in a wide variety of disciplines encourage the 30,000 students and researchers alike to develop their own individual talents. As one of the best research universities in Europe, the University of Groningen has joined forces with other top universities and networks worldwide to become a truly global center of knowledge.

The "RNA Folding Dynamics" lab is hosted in the prestigious Groningen Biomolecular Sciences and Biotechnology Institute (GBB), located in the Zernike Campus, at the northern edge of the city of Groningen.

The GBB is one of the larger institutes of the Faculty of Science and Engineering (FSE) and provides an excellent environment for top-notch research in the field of biomolecular sciences. Twelve vibrant research groups with strong roots in biophysics, biochemistry & molecular biology, cell biology, chemistry, computational biology, microbiology or genetics are organized in two focal areas: 'Molecular Mechanisms of Biological Processes' and 'Physiology and Systems Biology'.

When

The preferred starting date is April 1st, 2019.

Conditions of employment

The University of Groningen offers a salary of € 2,325 gross per month in the first year to a maximum of € 2,972 gross per month in the final year (salary scale Dutch Universities), based on a full-time position (1.0 FTE) excluding an 8% holiday allowance and an 8.3% end of the year bonus.

The position offered is for four years. Each successful candidate will first be offered a temporary position of one year with the option of renewal for another three years. Prolongation of the contract is contingent on sufficient progress in the first year to indicate that a successful completion of the PhD thesis within the contract period is to be expected. A Ph.D. training programme is part of the agreement and the successful candidate will be enrolled in the Graduate School Science and Engineering of the Faculty.

How to apply

Applications should consist of:

- a cover letter with background and motivation to apply for this position

- a curriculum vitae, including details of bachelor and master degrees, labwork experience and a publication list, if applicable
- detailed (1-2 pages) description of previous research experience, such as the bachelor/master research projects
- contact details of 2 academic references who can provide information on candidate's suitability for the position

Interviews are scheduled to take place in February 2019, in Groningen.

Please refer to the official job announcement of the University of Groningen with further details on the appointment and remuneration and apply online at:

<https://www.rug.nl/about-us/work-with-us/job-opportunities/overview?details=00347-02S0006PLP>

Deadline

Applications for this position can be sent until January 30 23:59 h / before January 31, 2019 (Dutch local time) by means of the online application form (click on "Apply" below on the advertisement on the University website).

Information

Question regarding the open positions and the objectives of the research can be obtained by contacting: Dr. Danny Incarnato (E-mail: dincarnato@incarnatolab.com; Skype: [incarnatolab](#)).

Additional information on the university, faculty, institute, research groups and the city:

- University of Groningen: <https://www.rug.nl/>
- Groningen Biomolecular Science and Biotechnology Institute (GBB): <https://www.rug.nl/research/gbb/>
- RNA Folding Dynamics research group: <http://www.incarnatolab.com>
- The conditions of employment: <https://www.rug.nl/about-us/work-with-us/>
- The city of Groningen: <http://www.rug.nl/about-us/who-are-we/discover-groningen/>