University of St Andrews

School of Biology

Research Fellow

University of St Andrews

Introduction

"Our remarkable students and staff are the lifeblood of St Andrews. It is their energy, vision and momentum [we] aim to support, to free them to use knowledge, ideas, and potential for the benefit of all." The Principal, Professor Sally Mapstone

Founded in 1413, the University of St Andrews is Scotland's first university and one of the oldest in the English-speaking world. With more than 600 years of academic excellence, we are proud of our reputation as a world-class centre for learning, teaching, and research.

St Andrews is a close-knit, international community set in a beautiful historic town on Scotland's east coast. Our students and staff come from over 140 countries, creating a diverse and globally minded environment. We strive to create an inclusive culture in which all can flourish, and the University have attained several diversity awards, including those related to race and gender equality, and support for carers, which demonstrate our commitment to this ambition. The University is consistently ranked among the UK's top institutions for student satisfaction, research quality, and teaching excellence.

We are a research-intensive university where creativity, collaboration, and critical inquiry are at the heart of everything we do. Whether you are joining us in an academic, professional, or support role, you will be part of a team committed to delivering outstanding education and making a meaningful contribution to society.

For those looking to be part of a university with deep-rooted heritage, a global outlook, and a forward-thinking approach, we invite you to consider joining our community at the University of St Andrews.

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School of Biology

The appointee will join the Biomedical Sciences Research Complex (BSRC) at the University of St Andrews, a highly collaborative research centre that brings together scientists from Biology, Chemistry, Physics and Medicine. The ethos of the BSRC is to break down barriers among disciplines and conduct world-class research relevant to health and disease. The BSRC offers state-of-the-art infrastructure for Structural Biology, Enzymology, Organic Chemistry and Molecular Biophysics. The laboratories house incubators and FPLCs for protein expression and purification; spectrophotometers, stopped-flow spectrofluorimeter, quench-flow and plate readers for enzyme kinetics; microcalorimeters and CD spectrophotometer for structural and thermodynamics studies; computer clusters and university-wide software licenses for computational chemistry and bioinformatics; NMR and MS spectrometers for small molecule and protein analysis, including native mass spec; a wide array of microscopies for single-molecule biophysics; a fully robotised suite for crystallisation and access to Diamond Light Source and ESRF.

The da Silva lab is a diverse team of scientists working collaboratively to unveil mechanisms of enzyme catalysis and allosteric regulation, and to harness that information to design inhibitors and chemical tools to modulate the function of enzymes.

The School of Biology at the University of St Andrews is fully engaged with the Athena Swan programme and has been awarded an Athena SWAN Gold award. The School values equality and diversity across its workforce, and offers a family friendly environment. In addition, a broad variety of measures have been, and actively continue to be, introduced to ensure effective career progression for everyone as well as to eradicate the historical underrepresentation of female academics at higher professional levels. Applicants with school age children should be aware that St Andrews and the surrounding villages are fortunate to have access to excellent primary and secondary schools and are an outstanding place to bring up a family.

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Job Description

Reporting to: Dr Rafael Guimaraes da Silva, Senior Lecturer in Biochemistry

Location: St Andrews

Job Family: Academic Research

Working Hours: Full time / 36.25 hours per week

Grade/Salary: Grade 6, £38,784 per annum

Reference Number: AR3262RS

Start Date: 1 July 2026

Interview Date: 11 May 2026

Duration of post: 36 months

Main Purpose of the Role

The Post-Doctoral Research Fellow will employ Structural Biology, Enzymology, and Bioinformatics to uncover the catalytic mechanism, allosteric regulation and evolution of the enzyme ATP phosphoribosyltransferase from the gut microbiome.

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Key Responsibilities

1. Plan and conduct own research activities within the project to meet deadlines and deliverables. This includes:
    i. Gene cloning, site-directed mutagenesis, and recombinant expression, and purification of enzymes
    ii. Enzyme kinetics and inhibition studies using UV-Vis, fluorescence, and ^{31}P-NMR spectroscopy
    iii. Crystallising and solving crystal structures of enzymes
    iv. Qualitative and quantitative data analysis and model fitting
    v. Bioinformatic analysis of genomes and proteins and building phylogenetic trees
2. Understand and convey material of a specialist or highly technical nature to the team and, where applicable, the funding body/sponsor through presentations, discussions and progress reports.
3. Write up research work for publication in peer-reviewed journals (as principal or co-author).
4. Write and present research at conferences, seminars and workshops.
5. Participation in outreach via press releases, social media, blogs and talks at public events.
6. Develop specialist knowledge in the research area to deal with problems affecting the achievement of research objectives and deadlines, devising solutions to unexpected challenges in collaboration with the PI.
7. Proactively engage with other members of the research group
8. Communicate effectively and precisely in written and spoken English
9. Supervise and provide support and guidance to research team members and assigned project student(s) as appropriate.
10. Work effectively independently and as part of a team
11. Use initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio.
12. Ensure compliance with all legal and regulatory requirements including equality and diversity, data protection, copyright and licensing, security, financial, health and safety and other University policies, procedures and codes as appropriate.

Special Requirements:

This position may involve some international travel to attend conferences
Some evening or weekend work may be required in order to run/monitor time sensitive experiments.

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Person Specification

Attributes	Essential	Desirable	Means of Assessment (i.e. application form, interview, test, presentation etc.)
Education & Qualifications (*technical, professional, academic qualifications and training required)*	Good first degree in Biochemistry, Chemistry, or closely related area Hold or be close to award of a PhD in Biochemistry or Structural Biology	MSc degree in Biochemistry, Chemistry or close related area	Application/CV
Experience & Knowledge (*examples of specific experience and knowledge sought*)	Experience of applying relevant analytical skills, techniques and methods including: Proficiency and independence in recombinant protein expression in E. coli and protein purification; crystallisation, X-ray diffraction data collection, processing, solving and refining protein structures and analysing them; theoretical and practical knowledge of basic enzyme kinetics and catalysis.	Knowledge of one or more of: Enzymology (enzyme kinetics in steady-state and pre-steady state, inhibition kinetics); mass spectrometry; MD simulations; bioinformatics (phylogenetic tree building); NMR	Publications Interview Letters of recommendation

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Person Specification

Attributes	Essential	Desirable	Means of Assessment (i.e. application form, interview, test, presentation etc.)
Competencies & Skills (*e.g. effective communication skills, initiative, flexibility, leadership etc*)	Effective communicator (orally and in writing) Well-developed presentation skills including ability to communicate complex, theoretical and technical material in an engaging and intelligible way to a range of audiences including non-specialists. Collegiality/willingness to work in a collaborative environment. Ability to work autonomously and to be proactive in identifying and resolving issues Administrative and IT skills appropriate for the efficient and effective delivery of research. Well developed time management skills with the ability to meet deadlines		Cover letter, interview, letters of recommendation

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Benefits

St Andrews offers more than just a place to work—it is a place to belong. We value collegiality, inclusion, and wellbeing, and we are committed to creating a workplace where staff can thrive and perform at their best.

In addition to the salary on offer for this position, there are a wide range of benefits for staff working at the University of St Andrews. The package for the Research Fellow includes:

- Financial contribution to relocation (subject to eligibility)
- Membership of the USS Pension Scheme with a generous employer contribution of 14.5%
- A hybrid working environment, including partial homeworking where appropriate and a range of family friendly policies, supporting work-life balance
- Staff discount scheme for local and national goods and services
- Free staff parking, employee Carshare and Cycle to Work Schemes and subsidised local bus travel
- Subsidised sports membership, reduced tuition fees on degree programmes for staff, access to training and development opportunities including LinkedIn Learning, access to library facilities, salary sacrifice scheme
- 34 Days Annual Leave plus 5 Public Holidays.

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How to Apply

We are committed to creating an accessible, fair and inclusive recruitment process for all candidates. If you require reasonable adjustments or accommodations during the application or interview process then please let us know and we will be happy to discuss support with you.

We encourage applicants to apply online at www.vacancies.st-andrews.ac.uk/welcome.aspx

If you have difficulties in completing the online application form, then please call +44 (0)1334 461990 or contact vacancies@st-andrews.ac.uk to discuss available support.

Applications should consist of

- Letter of application (to include motivation for the job and specific knowledge of ATP phosphoribosyltransferase research in the da Silva lab).
- CV
- Names and contacts of two referees

For all applications, please quote ref: **AR3262RS**

The University of St Andrews is a charity registered in Scotland (No SC013532).

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Equality, Diversity & Inclusion

At St Andrews, we see diversity as a strength and value the rich variety of backgrounds, identities and experiences of our staff, students and alumni. We are committed to making the University a beacon of inclusivity and creating an environment in where everyone can flourish and realise their potential.

We will achieve this through an approach that empowers our whole community and involves a determined shift in culture. Inclusivity will inform all of our policies and practices. The Principal, Professor Sally Mapstone

Diverse is a core theme of the University Strategy, and alongside our People Strategy, outlines a number of actions we are taking to create an inclusive culture. Our objectives include raising awareness of diversity events, initiatives and support, strengthening support for staff networks, creating more opportunities for employees to engage in consultations and discussions, offering a diverse range of rewarding career pathways and ensuring a working environment which supports positive working practices and behaviours.

We commit to providing a high-quality staff experience which enables all our staff to contribute, thrive, and perform at their best. By joining us at the University of St Andrews, you are joining a community which values difference, being your authentic self, and where you can play an active role in ensuring an inclusive environment for all.

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St Andrews

A modern location surrounded with ancient history, St Andrews is a dynamic and friendly town found on the east coast of Scotland. Situated in the Kingdom of Fife, St Andrews has easy links to nearby commuter towns and transport links (including airports) to the nearby cities of Dundee (13 miles) and Edinburgh (c. 1 hour by train).

Beyond the lecture halls and labs, St Andrews is home to stunning, unspoilt beaches and fresh sea air. Take a peaceful stroll or an energising walk with friends along the iconic two-mile stretch of the West Sands. If you prefer the water, ride the waves at the East Sands or try sailing, sea kayaking and windsurfing. For breathtaking views, a walk to the end of the stone pier is an experience not to be missed.

St Andrews and the surrounding area is home to a wide range of restaurants and shops, while boasting an array of beautiful beaches. St Andrews is also the home of golf and there are seven local courses including the famous Old Course.

Fife is an area filled history and culture. There are nearly 5,000 listed buildings and 50 conservation areas across the Kingdom, with some historic structures dating all the way back to the 12th century. St Andrews enjoys a microclimate and is typically much drier than western parts of the country.

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Further Information

This post will be primarily based in St Andrews.

Interviews will be held on **11 May 2026**

The University encourages all interested candidates to apply, and all applications received are assessed against the essential and desirable criteria listed in the further particulars. The successful candidate will have to demonstrate their right to work in the UK prior to commencing employment and where required, the University can support with visa sponsorship.

You are expected to uphold a duty of care towards colleagues, students, and communities, and to actively contribute to a safe, respectful, and inclusive environment. This includes responding appropriately to disclosures or reports of sexual misconduct, gender-based violence, bullying, harassment, or other concerns, in line with organisational policies, and signposting individuals to the appropriate departments

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