

# Awards and Grants - Dr. Alexander Shakeel Bates

This document provides a comprehensive listing of all fellowships, grants, scholarships, and awards received by Dr. Alexander Shakeel Bates throughout his academic career. These recognitions demonstrate sustained excellence across undergraduate studies, doctoral research, and postdoctoral work, as well as international recognition for research contributions.

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## Major Research Fellowships and Grants

### 1. Sir Henry Wellcome Postdoctoral Fellowship

**Grant Title:** Sir Henry Wellcome Postdoctoral Fellowship - “A neural Cartesian coordinate system for generating flexible internal goals”

**Amount:** £300,000 (approximately \$375,000 USD)

**Awarded by:** Wellcome Trust (United Kingdom)

**Year:** 2021

**Duration:** 48 months (2021-2025)

**Host Institution:** University of Oxford, later transferred to Harvard Medical School

**Sponsor:** Prof. Scott Waddell (University of Oxford) and Prof. Rachel Wilson (Harvard Medical School)

**Significance:** The Sir Henry Wellcome Postdoctoral Fellowship is one of the UK’s most prestigious early-career research awards, supporting outstanding researchers to develop their independent research careers. The fellowship covers full salary, research expenses, and equipment. Dr. Bates was also offered the Life Science Research Foundation Fellowship and Human Frontier Science Program Fellowship in the same year but chose the Wellcome Fellowship.

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### 2. EMBO Postdoctoral Fellowship

**Grant Title:** EMBO Postdoctoral Fellowship (EMBO ALTF 1258-2020)

**Amount:** \$60,000 USD basic stipend for 12 months + €3,432 travel allowance

**Awarded by:** European Molecular Biology Organization (EMBO)

**Year:** 2020

**Duration:** 24 months (renewable after first year, 2021-2022)

**Significance:** EMBO Postdoctoral Fellowships support the most talented life scientists to pursue research across Europe and beyond. Dr. Bates was selected for this competitive international fellowship and held

it before transitioning to the Henry Wellcome Fellowship. He was also offered the International Human Frontier Science Program (HFSP) Fellowship in the same competition.

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### 3. Herchel Smith PhD Scholarship

**Grant Title:** Herchel Smith Research Studentship

**Amount:** Approximately £95,000 total value over 4 years - All University and College fees (approximately £20,000/year) - Annual stipend: £19,919 (equivalent to Wellcome Trust PhD award rate) - Annual research allowance: £3,500

**Awarded by:** Herchel Smith Foundation, University of Cambridge

**Year:** 2015

**Duration:** 4 years (2015-2019)

**Host Institution:** MRC Laboratory of Molecular Biology, University of Cambridge

**Significance:** The Herchel Smith Studentships are among the most prestigious PhD scholarships at the University of Cambridge, awarded to exceptional students across all disciplines. The scholarship provided full financial support throughout Dr. Bates's doctoral research, which resulted in multiple high-impact publications and was recognized with the Max Perutz Prize and British Neuroscience Association Prize.

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### 4. Boehringer Ingelheim PhD Scholarship

**Grant Title:** Boehringer Ingelheim PhD Fellowship

**Amount:** Full fellowship covering stipend and research expenses for 24 months

**Awarded by:** Boehringer Ingelheim Fonds (Germany)

**Year:** 2016

**Duration:** 24 months (2016-2018)

**Host Institution:** MRC Laboratory of Molecular Biology, University of Cambridge

**Significance:** The Boehringer Ingelheim Fonds supports outstanding PhD students in basic biomedical research across Europe. Dr. Bates held this fellowship concurrently with the Herchel Smith Scholarship, with the Boehringer Ingelheim Fonds providing additional research support and access to an international network of fellows and alumni.

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## 5. Honorary Vice Chancellor's Award

**Grant Title:** Honorary Vice Chancellor's Award

**Amount:** Full PhD funding (tuition and stipend)

**Awarded by:** University of Cambridge

**Year:** 2015

**Significance:** The Honorary Vice Chancellor's Awards are given to exceptional students from outside the EU to support PhD research at Cambridge. This award recognized Dr. Bates's outstanding academic record and research potential at the start of his doctoral studies.

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## 6. Competitive Fellowship Offers (Not Pursued)

Dr. Bates received multiple additional prestigious fellowship offers in 2021, demonstrating broad international recognition:

**Human Frontier Science Program (HFSP) Postdoctoral Fellowship** - Awarded by: International Human Frontier Science Program - Amount: Approximately \$50,000/year - Not pursued (chose Wellcome Fellowship instead)

**Life Science Research Foundation (LSRF) Fellowship** - Awarded by: Life Science Research Foundation (United States) - Amount: \$60,000/year - Not pursued (chose Wellcome Fellowship instead)

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## PhD Thesis Awards

### 7. Max Perutz Prize

**Award Title:** Max Perutz Prize for Best PhD Thesis

**Amount:** Small monetary prize plus recognition

**Awarded by:** MRC Laboratory of Molecular Biology, University of Cambridge

**Year:** 2020

**Significance:** The Max Perutz Prize is awarded annually to recognize the best PhD thesis completed at the MRC Laboratory of Molecular Biology, one of the world's leading biomedical research institutes (home to multiple Nobel laureates). Dr. Bates's thesis on the *Drosophila* lateral horn and innate olfactory behaviors was selected for this honor, recognizing both scientific excellence and impact.

**Thesis:** "The lateral horn, a brain region in the fly, primes innate olfactory behaviours by combining patterns of second-order olfactory projection neuron activity" [University of Cambridge Repository](#)

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## 8. British Neuroscience Association (BNA) Postgraduate Prize

**Award Title:** BNA Postgraduate Prize for Best PhD Thesis in Neuroscience

**Amount:** £500 + travel to BNA Festival of Neuroscience

**Awarded by:** British Neuroscience Association (United Kingdom)

**Year:** 2020

**Significance:** The BNA Postgraduate Prize recognizes the single best PhD thesis in neuroscience completed at any UK university each year. This national-level recognition placed Dr. Bates's doctoral work at the pinnacle of UK neuroscience research. Winners are selected based on scientific merit, originality, and potential impact on the field.

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## Undergraduate Academic Excellence Awards

### 9. Burnstock Sessional Prize in Neuroscience (Three-time winner)

**Award Title:** Burnstock Sessional Prize in Neuroscience BSc

**Amount:** Small monetary prize

**Awarded by:** University College London, Faculty of Life Sciences

**Years:** 2013, 2014, 2015

**Significance:** Awarded to the student with the highest overall grade in each year of the Neuroscience BSc program at UCL. Dr. Bates received this award for all three years of undergraduate study, demonstrating sustained academic excellence throughout his bachelor's degree. The prize is named after Professor Geoffrey Burnstock, a pioneer in purinergic neuroscience.

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### 10. Dean's List for Faculty of Life Sciences (Two-time honoree)

**Award Title:** Dean's List for the Faculty of Life Sciences

**Amount:** Recognition award

**Awarded by:** University College London

**Years:** 2013, 2014

**Significance:** Students are named to the Dean's List based on exceptional academic performance. Dr. Bates was recognized in both his first and second years of undergraduate study at UCL.

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## 11. Rob Clarke Award

**Award Title:** Rob Clarke Award

**Amount:** £500 travel grant

**Awarded by:** The Physiological Society (United Kingdom)

**Year:** 2015

**Significance:** The Rob Clarke Awards support undergraduate students to present their research at scientific meetings. This award recognized Dr. Bates's undergraduate research project and supported his attendance at a scientific conference.

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## Research Training and Enrichment Awards

### 12. Amgen Scholars Programme

**Award Title:** Amgen Scholars Programme Fellowship

**Amount:** Full stipend plus housing for summer research (approximately \$6,000-8,000)

**Awarded by:** Amgen Foundation / University of Cambridge

**Year:** 2014

**Host Institution:** Department of Zoology, University of Cambridge (Dr. Matthias Landgraf's laboratory)

**Significance:** The Amgen Scholars Programme is a highly competitive international program supporting exceptional undergraduate students in summer research at premier institutions worldwide. Dr. Bates conducted research on neuronal structural plasticity in *Drosophila* larvae during this fellowship.

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### 13. University of Queensland Winter Research Scholarship

**Award Title:** University of Queensland Winter Scholarship Programme

**Amount:** Full stipend plus housing for winter research program (approximately AUD \$5,000-7,000)

**Awarded by:** University of Queensland, Australia

**Year:** 2015

**Host Institution:** Queensland Brain Institute (Dr. Ethan Scott's laboratory)

**Significance:** Competitive international research scholarship supporting undergraduate students to conduct research at the University of Queensland. Dr. Bates worked on tectal activity in zebrafish larvae using light sheet imaging during this program.

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#### 14. Paris Neuroscience Summer School Scholarship

**Award Title:** Paris Spring School in Neuroscience Techniques

**Amount:** Full tuition waiver plus stipend (approximately €2,000)

**Awarded by:** Paris Descartes University, France

**Year:** 2018

**Significance:** Competitive scholarship for advanced training in optical imaging and electrophysiological recording techniques in neuroscience. This intensive two-week course provided specialized technical training during Dr. Bates's PhD.

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#### Team Competition Awards

##### 15. iGEM Gold Medal (Two-time winner)

**Award Title:** International Genetically Engineered Machine (iGEM) Competition - Gold Medal

**Amount:** Medal and recognition; team funding

**Awarded by:** iGEM Foundation (International competition)

**Years:** 2013 (team member), 2014 (advisor)

**Institution:** University College London

**Significance:** iGEM is the premier international synthetic biology competition for undergraduate and graduate students, with hundreds of teams competing globally each year. Dr. Bates was a team member on the UCL 2013 team that won a Gold Medal, and returned as an advisor for the UCL 2014 team, which also achieved Gold Medal status.

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##### 16. Jack Petchey Achievement Award

**Award Title:** Jack Petchey Achievement Award

**Amount:** Grant for community project

**Awarded by:** Jack Petchey Foundation (United Kingdom)

**Year:** 2010-2012 (during secondary school)

**Significance:** The Jack Petchey Achievement Awards recognize young people who have made an outstanding positive contribution to their school or community. This award recognized Dr. Bates's leadership and community contributions during his secondary education.

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## Summary Statistics

**Total Number of Awards and Fellowships:** 16+ major awards

**Total Documented Funding Value:** Approximately £500,000+ (\$625,000+ USD) in direct fellowships and grants

**Geographic Recognition:** Awards from United Kingdom, European Union, United States, Australia, and International organizations

**Career Span:** Awards spanning from secondary school (2010) through postdoctoral career (2025)

**Competitive Success Rate:** Multiple instances of receiving multiple competitive offers simultaneously (e.g., EMBO + HFSP fellowships in 2020; Wellcome + LSRF + HFSP fellowships in 2021), demonstrating exceptional competitiveness

*This document comprehensively lists all major awards, grants, fellowships, and prizes received by Dr. Alexander Shakeel Bates. The recognition spans undergraduate academic excellence, doctoral research distinction, international postdoctoral fellowships, and specialized training awards, demonstrating sustained excellence and international recognition throughout his career.*

*Compiled: December 2024*