#### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.** 

NAME: Victoria L. Robinson

eRA COMMONS USER NAME (credential, e.g., agency login): VICTORIAROBINSON

POSITION TITLE: Associate Professor

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Trinity College, Hartford CT	BS	1988	Biochemistry
Villanova University, Villanova PA	MS	1992	Chemistry
University of Iowa, Iowa City IA	PHD	1997	Biochemistry/Structural Biology
HHMI/UMDNJ-RWJMS, Piscataway NJ	Postdoc	2004	Structural Biology/ Microbiology

#### A. Personal Statement

The goal of the research in my laboratory is to understand the relationship between events triggered from the onset of stress and cellular survival. We are particularly focused on how protein biogenesis, an inherently taxing process, is regulated to conserve resources and also to support adaption to adverse environmental factors to ensure homeostasis in bacteria. Although, we are considered a protein crystallography laboratory, there is a wide range of experience in the group utilizing biophysical techniques, such as fluorescence spectroscopy, ITC and small angle scattering (SAXS), CD, as well as biochemical assays to examine enzymatic properties of proteins and their interactions with various cellular partners. Current projects are centered around studying the interaction between the ribosome and two unusual GTPases. The first is BipA, a GTPase required for regulating responses in bacteria upon the onset of adverse growth conditions to ensure their survival. The second is a circularly permuted GTPase, nucleostemin, which shuttles proteins from the nucleolus to the cytoplasm to support the maturation of the 60S ribosomal subunit.

We have many years of experience working with BipA. We are taking a multi-disciplinary approach to understand the cellular function of these proteins. We are using phenotypic studies, genetics, biochemistry and biophysics to examine how BipA is able to sense the onset of stress and modulate ribosomal activities to secure survival of the microorganism. This project is supported through strong collaborations with Dr. David Benson, a world renown expert in microbial physiology, Dr. Simon White, a fellow structural biologist with a track record in cryo-EM and Dr. James Cole, established himself as expert in utilizing biophysical techniques to examine protein:RNA interactions.

#### **B. Positions and Honors**

#### **Positions and Employment:**

1988-1990	Research Assistant, Rhone-Poulenc Rorer Biotechnology, Inc., King of Prussia, PA
1990-1992	Assistant Scientist, Rhone-Poulenc Rorer Biotechnology, Inc., King of Prussia, PA
1992-1997	Graduate Research Assistant, University of Iowa; Advisor: Dr. Arthur Arnone
1998	SmithKline Beecham Pharmaceuticals; Sponsor: Dr. Sherin Abdel-Meguid
1999-2004	Post-doctoral Associate, HHMI/ UMDNJ-RWJMS; Advisor: Dr. Ann M. Stock

2004-2010 Assistant Professor, Dept. of Molecular and Cell Biology, University of Connecticut, Storrs 2010-present Associate Professor, Dept. of Molecular and Cell Biology, University of Connecticut, Storrs 2017-present Co-Director, Professional Master's Program in Applied Biochemistry and Cell Biology

## Other Experience and Professional Memberships:

2005-present Member, Institute for Material Sciences, Univ. of Connecticut, Storrs, CT

2007-2016 NSF Peer Reviewer, ad hoc

2010-2014 Ombudsperson, Department of Physics, University of Connecticut

2010-present Member, American Heart Assoc. Basic Cell - Protein & Crystallography Peer Review Committee

2011-2016 Structural Biology, Biochemistry and Biophysics Graduate Program Chair 2011-2017 Co-head, Protein X-ray Crystallography Facility, University of Connecticut

2012-present Director, UConn Partnership for Excellence in Structure Biology

2012-2018 Member of the MCB Promotion, Tenure and Review Committee, Chaired 2012-2013

2015-present Member Graduate Faculty Council

2015-present Review Editor, Molecular Recognition, Frontiers in Molecular Biosciences

2017-present Graduate School Hearing Committee

2018-present Co-chair, Research Advisory Council, Research Excellence Program, Biochemistry/Chemistry

### **Honors and Awards:**

1994 American Heart Association (AHA) Predoctoral Fellowship (declined)

1994-1997 Predoctoral Fellowship, Univ. of Iowa Center for Biocatalysis and Bioprocessing

2001 Research Achievement Award, UMDNJ-RWJMS

2006 American Heart Association (AHA) Scientist Development Grant

2009 Faculty Early Career Development Award, National Science Foundation

#### C. Contributions to Science

- 1. Two-Component Signaling Field: During my post-doctoral work, I crystallized the second full length response regulator (RR) from the OmpR/PhoB family of proteins providing first evidence that different signaling mechanisms were being utilized by this large family of proteins. A follow up study using mutations was designed to examine how intermolecular contacts contributed to communication between the N- and C-terminal domains of these RRs. We also carried out a complete structural analysis addressing the dephosphorylation of CheY by its cognate phosphatase CheZ. Through multiple structures and complimentary biochemistry, we proved that CheZ associates with a "meta-active" state of CheY that is distinct from either the active or inactive form of the protein indicating a continuous flow of information between these two partners. Since arriving at UConn, I have continued in the two-component field pairing up with Dr. Andrei Alexandrescu to solve the NMR structure of an unusual RR Sma1. This CheY like protein is missing the fourth α-helix of the consensus 455 face but instead has a dynamic loop suggesting that it has an altered recognition interface for binding to downstream effectors.
  - a. Stock, A.M., Robinson, V.L. and Goudreau, P.N. (2000) Two-component signal transduction. *Ann. Rev. Biochem.* **69**:183-215.
  - b. Robinson, V.L., Wu, T. and Stock, A.M. (2003) Structural Analysis of the interdomain interface of DrrB, An OmpR/PhoB family member from *Thermotoga maritima*. *J. Bacteriol*. **185**:4186-94.
  - c. Guhaniyogi, J., Robinson, V.L. and Stock, A.M. (2006) Crystal structures of beryllium fluoride-free and beryllium fluoride-bound CheY in complex with the conserved C-terminal peptide of CheZ reveal dual binding modes specific to CheY conformation. *J. Mol. Biol.* **359**:624-45.
  - d. Sheftic, S.R., Garcia, P.P., Robinson, V.L., Gage, D.J. and Alexandrescu, A.T. (2012) Nuclear magnetic resonance structure and dynamics of the response regulator Sma0114 from *Sinorhizobium meliloti*. *Biochem.* **51**:6932-41.
- 2. The Role of Bacterial GTPases in Translation and Stress: My interest in bacterial GTPases began during my time at UMDNJ where I solved the first structure of a GTPase with multiple G-domains, a bacterial protein EngA (Der). This work continued at UConn where my group determined the ribosome binding properties of the translation factor BipA. We had the novel finding that BipA forms two distinct biologically relevant complexes with the ribosome, 70S:BipA and 30S:BipA. This is the only bacterial protein known to have two distinct ribosome

binding modes. The formation of these species is dependent upon the guanine nucleotide pool in the cell, specifically GTP and ppGpp, an alarmone responsible for adaptation to altered growth conditions in bacterial cells. Our data suggests that BipA acts as an intermediary between the ribosome and the cellular environment and that its structural and regulatory properties influence how the ribosome responds to current cellular conditions. These findings spurred numerous investigations into how ppGpp influences the biochemical and biophysical properties of the protein and how it regulates translational events in response to stress.

- a. Robinson, V.L., Hwang, J., Fox., E., Inouye., M. and Stock, A.M. (2002) Domain arrangement of Der, a switch protein containing two GTPase domains. *Structure* **10**:1649-58.
- b. deLivron, M.A. and Robinson, V.L. (2008) Salmonella enterica Typhimurium BipA Exhibits Two Distinct Ribosome Binding Modes. *J. Bacteriol.* **190**:5944-52.
- c. deLivron, M.A., Makanji, H.S., Lane, M.C. and Robinson, V.L. (2009) A novel domain in translational GTPase BipA mediates interaction with the 70S ribosome and influences GTP hydrolysis. *Biochemistry* **48**:10533-41
- d. Dionne, G.L., Boyd, K., Shaqra, A.M., Anand, G.S., May, E.R. and Robinson, V.L. (2019). A Conserved Arginine in Switch I is Critical for ppGpp Binding to the Translational GTPase BipA. *PNAS*, *submitted*.
- 3. Understanding Nucleo-cytoplasmic Trafficking: We have been addressing questions regarding the molecular mechanism of action of nucleostemin, a circularly permuted GTPase that plays an important role in maintaining nucleolar integrity. NS shuttles from the nucleolus to the nucleoplasm in response to cell cycle changes and stress conditions. This trafficking depends on interactions with multiple partners that regulate critical processes such as cellular proliferation, ribosome biogenesis and DNA maintenance thereby ensuring homeostasis in eukaryotic cells. All of these activities suggest that NS acts as a GTP dependent regulatory link between developmental controls and cell cycle machinery. We have applied bioinformatics tools together with numerous biophysical techniques to begin to understand the solution properties of Drosophila melanogaster nucleostemin 1 (NS). Our studies indicate that NS has large regions of disorder at the N- and C- termini while the core of the protein surrounding the cpGTPase domain is structured. Combining SAXS data and molecular dynamics flexible fitting we provide the first structural model of this family of proteins. A study characterizing the guanine nucleotide binding and enzymatic properties of the protein and their influence of protein structure is under preparation.
  - a. Rosby, R, Cui, Z., Rogers, E., deLivron, M.A., Robinson, V.L. and DiMario, P.J. (2009) Knockdown of the Drosophila GTPase nucleostemin 1 impairs large ribosomal subunit biogenesis, cell growth, and midgut precursor cell maintenance. *Mol. Biol. Cell.* **20**:4424-34.
  - b. Daman, T.H., Lary, J. W., Cole, J.L., May, E.R. and Robinson, V.L. (2019) Intrinsic Structural Disorder Revealed in the Circularly Permuted GTPase Nucleostemin. *Frontiers in Bioscience, submitted.*

#### D. Additional Information: Research Support and/or Scholastic Performance

## **Ongoing Research Support**

AG161195 Lynes, PI

9/1/17 to 8/31/18

Connecticut Innovations

A Therapeutic Monoclonal Antibody for the Treatment of Inflammatory Bowel Disease

The goal of this project is to determine how an antibody raised against the stress response protein metallothionine (MT) influences the progression of the immune response.

Role: Co-Investigator

6204190 Robinson, PI

10/1/17 to 12/01/18

Yale Program for Innovative Therapeutics for Connecticut's Health (PITCH)

Determine Potential Resistance and Small Molecule Assay Development/Inhibitor Screening

The main aim of the project is to develop and optimize a high throughput screen and secondary screening protocols to search for and validate small molecule inhibitors of BipA.

UConn Research Excellence Program Award Robinson, PI, Benson, Co-PI 7/1/18 to 6/30/19 Harmonizing Physiology with Structural Biology Approaches to Define the Roles of the BipA in Translation The goal of this research is to define the biochemical features of BipA that support its role in stress adaptation.

Atomwise AIMS Award Robinson, PI

12/1/18 to 12/31/19

Virtual Screening for Inhibitors of the Bacterial Translation Factor BipA

Working with scientist at Atomwise where they will carry out virtual screening with their proprietary AtomNet software. We will then receive ~75 compounds representing their top hits which will be tested by us to determine if any modulate the biochemical activities of BipA.

Start Preliminary Proof-of-Concept Fund Robinson, Pl UConn Office of Vice President for Research (OVPR) 4/01/19 to 3/31/20

Investigating Host-Pathogen Interactions Regulated by BipA for Antimicrobial Development

Using an enterohemorrhagic *Escherichia coli* (EHEC) model system we are determining how BipA is regulating actin pedestal formation associated with host-pathogen interactions and colonization.

PITCH2 Award Robinson, PI

04/1/19 to 3/31/20

UConn Program in Innovative Therapeutics for Connecticut Health, Connecticut Innovations High Throughput Screening to Identify Small Molecule Inhibitors of BipA

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The goal of the project is to use HTS to identify and subsequently validate small molecule inhibitors of BipA.

### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: White, Simon

eRA COMMONS USER NAME (credential, e.g., agency login): SIMONWHITE

POSITION TITLE: Assistant Professor

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
	(ii applicable)	101101/ 1 1 1 1	
University of Hertfordshire, Hatfield, Hertfordshire	BS	07/2005	Applied Biology
University of Leeds, Leeds, West Yorkshire	MS	07/2006	Biosciences
University of Leeds, Leeds, West Yorkshire	PHD	01/2011	Bionanotechnology

## A. Personal Statement

I am well placed to pursue the work laid out in this application for cryo-EM time. I have the experience with cryo-electron microscopy needed for success and have three structures deposited in the electron microscopy databank, and I am currently collaborating with others at the University of Connecticut on cryo-electron microscopy data. I am building my collaboration with Chen Xu at the University of Massachusetts facility and have collected data using their microscopes for other projects.

As senior postdoc in the Stockley lab for five years I have the experience of lab, project and budget management to successfully carry out the work described in this proposal. During that time I supervised 8 students. Of the 8 undergraduate students I mentored, all graduated successfully and six of them have continued on to pursue a Ph.D. Obviously I was part of a team that guides these students, but for many of them, the time spent in the lab is their only experience of lab based science and so for all of them to continue on to a Ph.D. highlights my mentorship and supervising abilities. Currently in my lab at UConn I have two graduate students as well as 4 masters students and 4 undergraduates. We have monthly lab meetings where they present their work in a friendly and supportive environment. These lab meetings are an important tool for trouble shooting problems they may have and developing new avenues of research. They are an excellent team and we are well placed to take our preliminary data, as highlighted in this application, and complete the stated aims.

- Patel N, White SJ, Thompson RF, Bingham R, Weiß EU, Maskell DP, Zlotnick A, Dykeman E, Tuma R, Twarock R, Ranson NA, Stockley PG. HBV RNA pre-genome encodes specific motifs that mediate interactions with the viral core protein that promote nucleocapsid assembly. Nat Microbiol. 2017 Jun 19;2:17098. PubMed PMID: <u>28628133</u>; PubMed Central PMCID: <u>PMC5495169</u>.
- Shakeel S, Dykeman EC, White SJ, Ora A, Cockburn JJB, Butcher SJ, Stockley PG, Twarock R. Genomic RNA folding mediates assembly of human parechovirus. Nat Commun. 2017 Feb 23;8(1):5. PubMed PMID: <u>28232749</u>; PubMed Central PMCID: <u>PMC5431903</u>.

#### **B. Positions and Honors**

# Positions and Employment

2010 - 2017 Post doctoral research assistant, UNIVERSITY OF LEEDS
2017 - Assistant Professor, UNIVERSITY OF CONNECTICUT

# Other Experience and Professional Memberships

## **Honors**

2005	Award for Best Result in Year Group, University of Hertfordshire
2006	Award for Best Result in Year Group, University of Leeds
2015	Award for Outstanding Contribution (Oral Presentation) at the XXIV Biennial Conference on Phage/Virus Assembly, Phage and Virus Assembly
2016	Best Poster Award at FASEB: Virus Structure and Assembly, FASEB
2016	Best Poster Award at the Astbury Conversation Symposium, University of Leeds
2016	The Dean's Vacation Research Scholarship, University of Leeds

#### C. Contribution to Science

1. I was a PDRA at Leeds University for 5 years, working with Professor Peter Stockley, investigating the assembly mechanisms of positive sense-single stranded RNA viruses. My PDRA work has been instrumental in the discovery, characterisation and validation of a completely unsuspected aspect of the assembly mechanisms in this class of RNA viruses. It appears that they all use an evolutionarily conserved mechanism to ensure survival of the virion in the challenging environment of the infected cell. Our recent discovery of this mechanism in a picornavirus forces a re-examination of decades of research that showed that they did not exist in this family of viruses. These discoveries lead naturally to potential real world applications, including the development of novel antiviral therapies and the creation of artificial and completely safe viral vaccines.

The work to identify packaging signals in human pathogens (human parechovirus, hepatitis B and C) had a major collaborative association with Prof. Reidun Twarock at the University of York (Department of Mathematics, Centre for Complex Systems Analysis). It features in high impact papers, which have been published in Nature Communications (Shakeel, Dykeman and White [joint first authors], et al.) and Nature Microbiology (Patel and White [joint first authors], et al.). It was an important corner-stone of a patent on a novel anti-viral strategy (jointly held by the Universities of York, Leeds and Helsinki, US20160326529), for which I am a co-inventor, and a Wellcome Trust Joint Senior Investigator Grant to Profs. Stockley and Twarock as well as a grant from the Medical Research Council for which I was named post-doc. The Nature Communications paper received widespread media coverage and resulted in 32 news articles, including articles in CNN and ABC. Likewise, the Nature Microbiology paper resulted in 7 news articles, a "Behind the paper" article in Nature Microbiology, a specific article in Nature Reviews Microbiology discussing the work (York, A. (2017). Viral Infection: Packing to Leave. Nature Reviews Microbiology. 15: 450-451) and three cryoelectron microscopy structures (in which I did the reconstructions) deposited in the electron microscopy data bank (EMDB-3714, EMDB-3715 and EMDB-3716).

My other work on packaging signals has focused on one of the model systems for viral assembly: the bacteriophage MS2. Working with Prof. Reidun Twarock (York University) and Prof. Cheng Kao (Indiana University), I was part of the team that identified the 60 coat protein:RNA contacts in MS2, the first time that all of the packaging signals have been identified within a virus (see Direct Evidence for Packaging Signal-Mediated Assembly of Bacteriophage in JMB). Our work was the focus of a review by Peter Prevelige (Follow the Yellow Brick Road: A paradigm Shift in Virus Assembly, 2016, Journal of Molecular Biology, 428: 416-418) which highlights the importance of my work. The entire field of (+)ssRNA viruses must now revisit existing mechanisms of assembly in the light of our work and I expect many groups to start exploring packing signals in other (+)ssRNA viruses.

a. Patel N, White SJ, Thompson RF, Bingham R, Weiß EU, Maskell DP, Zlotnick A, Dykeman E, Tuma R, Twarock R, Ranson NA, Stockley PG. HBV RNA pre-genome encodes specific motifs that mediate interactions with the viral core protein that promote nucleocapsid assembly. Nat Microbiol. 2017 Jun 19;2:17098. PubMed PMID: <u>28628133</u>; PubMed Central PMCID: <u>PMC5495169</u>.

- b. Shakeel S, Dykeman EC, White SJ, Ora A, Cockburn JJB, Butcher SJ, Stockley PG, Twarock R. Genomic RNA folding mediates assembly of human parechovirus. Nat Commun. 2017 Feb 23;8(1):5. PubMed PMID: 28232749; PubMed Central PMCID: PMC5431903.
- c. Stewart H, Bingham RJ, White SJ, Dykeman EC, Zothner C, Tuplin AK, Stockley PG, Twarock R, Harris M. Identification of novel RNA secondary structures within the hepatitis C virus genome reveals a cooperative involvement in genome packaging. Sci Rep. 2016 Mar 14;6:22952. PubMed PMID: 26972799; PubMed Central PMCID: PMC4789732.
- d. Rolfsson Ó, Middleton S, Manfield IW, White SJ, Fan B, Vaughan R, Ranson NA, Dykeman E, Twarock R, Ford J, Kao CC, Stockley PG. Direct Evidence for Packaging Signal-Mediated Assembly of Bacteriophage MS2. J Mol Biol. 2016 Jan 29;428(2 Pt B):431-48. PubMed PMID: 26608810; PubMed Central PMCID: PMC4751978.
- 2. I have made contributions to the field of bio-nanoscience, exploring bio-templated device construction in collaboration with Profs. Giles Davies and Christoph Wälti at the University of Leeds and Dr. Steve Johnson at the University of York. This utilized the M13 bacteriophage displaying coiled-coil motifs to specifically assemble the phage particle between two electrodes. This work culminated in the publication in the high impact journal of Angewandte Chemie studying the structure and assembly of coiled-coils on a 2-D surface. I showed that the assembly of coiled-coils on a surface results in molecular crowding and results in the properties of the coiled-coil changing, i.e. the pH at which they assemble/disassemble is radically changed when crowded onto a 2D surface, as compared to solution. This work has important implications for various 2-D surface techniques, e.g. surface plasmon resonance, and bio-nano diagnostic devices. It has been cited 9 times. The work is continuing using the B23 (circular dichroism) beamline at the diamond light source to study the control of coiled-coil interactions using voltage controlled electrodes with the aim of making a switchable surface for the capture and release of various biological molecules, e.g. specific cell types in cell sorting applications.
  - a. White SJ, Johnson SD, Sellick MA, Bronowska A, Stockley PG, Wälti C. The influence of two-dimensional organization on peptide conformation. Angew Chem Int Ed Engl. 2015 Jan 12;54(3):974-8. PubMed PMID: 25413024; PubMed Central PMCID: PMC4506555.
  - b. White SJ, Johnson S, Szymonik M, Wardingley RA, Pye D, Davies AG, Wälti C, Stockley PG. Directed surface attachment of nanomaterials via coiled-coil-driven self-assembly. Nanotechnology. 2012 Dec 14;23(49):495304. PubMed PMID: <u>23154792</u>; PubMed Central PMCID: PMC4785676.
  - c. White SJ, Morton DW, Cheah BC, Bronowska A, Davies AG, Stockley PG, Wälti C, Johnson S. On-surface assembly of coiled-coil heterodimers. Langmuir. 2012 Oct 2;28(39):13877-82. PubMed PMID: 22934624; PubMed Central PMCID: PMC4820041.
- 3. I have used SELEX to identify many novel RNA aptamers which have played an important role in the development of biosensors. The first set of aptamers was involved in the detection of the aminoglycoside antibiotics in collaboration with FERA (Food and Environment Research Agency) in the U.K. who wanted to develop a cheap and quick biosensor for the detection of aminoglycoside antibiotics in milk. Aptamers were discovered that could be used in an assay and detect the antibiotics in the nM range. The second set of RNA aptamers that I developed was for the differentiation between different conformations of amyloid precursors. I successfully identified aptamers that could achieve this.
  - a. Sarell CJ, Karamanos TK, White SJ, Bunka DH, Kalverda AP, Thompson GS, Barker AM, Stockley PG, Radford SE. Distinguishing closely related amyloid precursors using an RNA aptamer. J Biol Chem. 2014 Sep 26;289(39):26859-71. PubMed PMID: <u>25100729</u>; PubMed Central PMCID: <u>PMC4175327</u>.
  - b. Derbyshire N, White SJ, Bunka DH, Song L, Stead S, Tarbin J, Sharman M, Zhou D, Stockley PG. Toggled RNA aptamers against aminoglycosides allowing facile detection of antibiotics using gold nanoparticle assays. Anal Chem. 2012 Aug 7;84(15):6595-602. PubMed PMID: <u>22793869</u>;

PubMed Central PMCID: PMC3413241.

## D. Additional Information: Research Support and/or Scholastic Performance

# **Ongoing Research Support**

17-EXO17 2-0063, NASA White, Simon (PI) 04/01/18-03/31/21

Characterizing the molecular mechanisms and the limits of archaeal gene transfer using Haloferax volcanii as a model genetic system

Though archaea are largely unexplored for horizontal gene transfer mechanisms, the model archaeon Haloferax volcanii has demonstrated a cell-cell contact mediated DNA transfer mechanism involving cell fusion events that generate a 1N/2N/1N chromosome copy number cycle. This mechanism leads to the recombination of DNA, and changes their genotype and phenotype. How this mechanism functions in the genetically tractable Haloferax volcanii is still not understood and many of the features remain elusive. The following specific aims/objectives are proposed to delve deeper into the ambiguities! 1) Identify and characterize components required for cell-cell contact mediated gene exchange (mating) in Haloferax volcanii. 2) Identify and characterize components of a homoserine lactone based quorum sensing system in Haloferax volcanii. 3) Characterize the limits to HGT via mating in Hfx. volcanii.

Role: Co-Investigator

Start-up grant, University of Connecticut White, Simon (PI) 08/23/17-08/23/22 Department Start-up grant.

The purpose of this grant is to set up the PI's laboratory, as well as a facility for cryoEM sample preparation. To be used to fund preliminary studies needed to be competitive for extramural research support

Role: PI

AIMS, ATOMWISE AIMS AWARD White, Simon (PI) 05/31/18-05/31/19 EV71 2C as a drug target

The EV71 crystal structure was used to identify 72+ compounds identified with a customized small molecule virtual screen using Atomwise's AI technology. Atomwise ship these compounds to the researcher for testing in a malachite green ATPase assay.

Role: PI