## Glen van den Bergen

(+61) 4 12 047 642 contact@glenvdb.com

#### **WORK HISTORY**

## UNIVERSITY OF QUEENSLAND

#### PHD CANDIDATE

Thesis in preparation.

Brisbane, Qld Apr 2016 – Oct 2019

Developed scientific software tools made available via web services at

atb.uq.edu.au/asp and atb.uq.edu.au/peg.

# UNIVERSITY OF QUEENSLAND

### **RESEARCH ASSISANT**

Brisbane, Qld Aug 2015 – Apr 2016 Continued research on predicting structure of antimicrobial peptides using evolutionary algorithms to optimise amphipathicity. Updated documentation and web administration features of the Automated Topology Builder (atb.uq.edu.au).

#### SPEEDWELL SENIO

### **SENIOR TEST ANALYST**

Brisbane, Qld Jun 2012 – July 2015 Defined, executed, and reported testing outcomes for web and smartphone applications via test plans, test cases, bugs reports, and fix verifications. Coordinated a team of offshore testers based in Manila, Philippines. Conducted team and professional development exercises in Manila.

#### **GLOBAL X**

#### **SENIOR TEST ANALYST**

Brisbane, Qld Aug 2011 – Jun 2012 Established software-testing and release practices. Performed requirements analysis of software systems and definition of acceptance criteria. Performed paired testing with software engineers during development for rapid turnaround on defect identification and resolution.

### **KROME STUDIOS**

#### **TECHNICAL WRITER**

Brisbane, Qld Feb 2008 – May 2010 Documented features of in-house development tools for interactive entertainment including usage manuals and video tutorials.

#### **KROME STUDIOS**

### **TEST ANALYST**

Brisbane, Qld Nov 2006 – Feb 2008 Managed a team of testers on projects across multiple platforms to investigate interactive software, identify defects, record and manage defects, and report software quality to project managers.

#### **EDUCATION**

# UNIVERSITY OF QUEENSLAND

#### **PHD CANDIDATE**

Thesis in preparation.

Brisbane, Qld Apr 2016 – Oct 2019

# UNIVERSITY OF QUEENSLAND

#### MASTER OF BIOINFORMATICS

Brisbane, Qld Jan 2012 – Nov 2015 Studied theory and practice of biological sciences, including utilisation of software to analyse and organise biological data. Awarded the Dean's Commendation for Academic Excellence with a cumulative GPA of 6.75.

#### Achievements include:

- Concepts in Bioinformatics: High Distinction (7/7)
- Advanced Bioinformatics: High Distinction (7/7)
- Virology: Distinction (6/7)
- Computational Statistics: Distinction (6/7)
- Advanced Genome Informatics: Distinction (6/7)
- Research Proposal: High Distinction (7/7)
- Research Project: High Distinction (7/7)
- Major Research Project & Seminars: High Distinction (7/7)
- Data Mining: High Distinction (7/7)

### QUEENSLAND UNIVERSITY OF TECHNOLOGY

# BACHELOR OF INFORMATION TECHNOLOGY / BACHELOR OF COMMUNICATION DESIGN

Brisbane, Qld Jan 2002 – Nov 2006 Studied fundamental and advanced concepts in programming and software engineering using Java and C/C++. Learned skills in illustration, animation, and interactivity using multimedia software packages such as 3D modelling software and the Adobe suite of tools including Photoshop and Illustrator.

#### Achievements include:

- Software Engineering Principles: High Distinction (7/7)
- Media Technology 2: Distinction (6/7)

## MORETON INSTITUTE OF TAFE

### **DIPLOMA OF MULTIMEDIA**

Studied skills in illustration, animation, and programming to develop interactive software using the Adobe and Macromedia software suites.

Brisbane, Qld Jan 2001 – Nov 2001

#### RESEARCH PROJECTS

## UNIVERSITY OF QUEENSLAND

## UNDERSTANDING THE RELATIONSHIP BETWEEN STRUCTURE AND ACTIVITY OF MEMBRANE DISRUPTING ANTIMICROBIAL PEPTIDES

Brisbane, Qld 2019 Supervisor: Alan E. Mark (School of Chemistry and Molecular Biosciences, Brisbane)

Manuscript in preparation.

# UNIVERSITY OF QUEENSLAND

## MOLECULAR DYNAMICS SIMULATIONS OF ANTIMICROBIAL PEPTIDES CROTALICIDIN AND DERMADISTINCTIN K

Brisbane, Qld 2019 Supervisor: Alan E. Mark (School of Chemistry and Molecular Biosciences, Brisbane)

Manuscript in preparation.

# UNIVERSITY OF QUEENSLAND

## PREDICTING THE ACTIVE STRUCTURE OF MEMBRANE DISRUPTING ANTIMICROBIAL PEPTIDES

Brisbane, Qld 2019

van den Bergen, G., Stroet, M., Caron, B., Poger, D., Mark, A.E.

Biochimica et Biophysica Acta – Biomembranes

Supervisor: Alan E. Mark (School of Chemistry and Molecular Biosciences, Brisbane)

Manuscript under review.

Developed method to predict the active structure of membrane disrupting antimicrobial peptides. The method optimises amphipathicity using an evolutionary algorithm. Available as a web service: <a href="atb.uq.edu.au/asp">atb.uq.edu.au/asp</a>

# UNIVERSITY OF QUEENSLAND

### ANALYSIS OF METASTATIC PROTEIN NETWORKS IN CANCER

van den Bergen, G., Inglis, J.C., Ling, J., Thompson, J., Emerson, M., Davis, M.J.

Brisbane, Qld Aug 2013 – Nov 2013

Supervisor: Melissa Davis (Walter & Eliza Hall Inst. of Medical Research, Melbourne)

Completed as part of assessment for Master of Bioinformatics.

Led a team of four undergraduate students identifying disrupted protein interaction networks involved in metastasis. The intersection of identified sub-networks between three types of solid tumour highlighted shared metastatic pathways.

Awarded high distinction.

#### **AWARDS**

# UNIVERSITY OF QUEENSLAND

#### **CTCMS SYMPOSIUM POSTER PRIZE**

Brisbane, Qld Nov 2016 Awarded for best poster prize at the Centre for Theoretical and Computational Molecular Science (CTCMS) Symposium on Computational Methods and Applications.

# UNIVERSITY OF QUEENSLAND

### **DEAN'S COMMENDATION FOR ACADEMIC EXCELLENCE**

Brisbane, Qld Dec 2015 Awarded for Master of Bioinformatics completed in 2015, with a cumulative GPA of 6.75.

# UNIVERSITY OF QUEENSLAND

#### **RESEARCH SCHOLARSHIP**

Brisbane, Qld Dec 2014 – Jan 2015 Awarded for continuing study on antimicrobial peptides for Research Project over summer semester 2014-2015, during Master of Bioinformatics.

#### **TUTORING**

# UNIVERSITY OF QUEENSLAND

### **ADVANCED BIOINFORMATICS**

Brisbane, Qld Semester 2, 2016 "Advanced Bioinformatics will equip the student with the interdisciplinary knowledge and skills necessary to meet the data-centred challenges and demands of modern-day biology."

Assisted in the running of workshops and practical sessions, and marking assessment.

# UNIVERSITY OF QUEENSLAND

### INTRODUCTION TO BIOINFORMATICS AND COMPUTATIONAL BIOLOGY

Brisbane, Qld Semester 1, 2016 "This course aims to provide students from a broad range of backgrounds with an introduction to bioinformatics, an emerging discipline that is transforming how we make discoveries in molecular bioscience."

Assisted in the running of workshops and marking assessment.

# UNIVERSITY OF QUEENSLAND

### **GENOMICS AND BIOINFORMATICS**

Brisbane, Qld Semester 1, 2016 "This course will provide a practical introduction to genomics and bioinformatics. Topics include next-generation sequencing, biological databases, sequence alignment, similarity searches, genome browsers, molecular evolution, human disease genetics and proteomics."

Assisted in the running of practical sessions.

#### **VOLUNTEERING**

### ABACBS/COMBINE MEMBER OF ORGANISING COMMITTEE FOR COMBINE SYMPOSIUM

Brisbane, Qld June – Nov 2016 Helped organize and run the COMBINE Symposium for students and early career researchers. Duties included various graphic design tasks, various operational tasks on the day, providing assistance to delegates, and chairing the careers panel.

### OPEN HEALTH HACK 2015 (BRISBANE)

# KNOWLEDGE FOUNDATION

Volunteered at the Brisbane chapter of Health Hack 2015 to assist Karmen Condic-Jurkic in recruiting participants to the project for a molecular dynamics repository. Project was awarded 2<sup>nd</sup> place prize for \$2000 worth of legal services and counselling.

Brisbane, Qld Oct 2015

### PYCON PYTHON CONFERENCE AU 2015

Brisbane, Qld Aug 2015 Volunteered for two days as an organiser at PyCon AU 2015.

### ROTARY ROTARY YOUTH LEADERSHIP AWARDS (RYLA)

Brisbane, Qld May 2006 May 2005 RYLA is a youth leadership development program to promote personal and professional development including topics on public speaking, goal setting, negotiation skills, motivation, interpersonal skills and more. Attended in 2005 as a participant and in 2006 as a volunteer team leader.

#### **REFEREES**

### UNIVERSITY OF PROF. ALAN E. MARK

QUEENSLAND

Principal Investigator of Molecular Dynamics Group, School of Chemistry & Molecular

Brisbane, Qld Biosciences.

### UNIVERSITY OF DR. DAVID POGER

**QUEENSLAND** 

Senior Research Fellow in Molecular Dynamics Group, School of Chemistry & Molecular

Brisbane, Qld Biosciences.

### UNIVERSITY OF ASSOC. PROF. MIKAEL BODEN

**QUEENSLAND** 

Program director of Master of Bioinformatics, School of Chemistry & Molecular

Brisbane, Qld Biosciences.

# WALTER & ELIZA DR. MELISSA DAVIS HALL INSTITUTE

Joint Head, Division of Bioinformatics, Walter & Eliza Hall Institute of Medical Research.

Melbourne, Vic

Contact details of referees available on request.