

Agnieszka Monika Wiklendt



EDUCATION

- 2006 Computer Repair and Networking
2005 Advanced Course in High Resolution Molecular Cytogenetics
2004 St John's Ambulance Senior First Aid Certificate
2004 Introduction and Advanced Microsoft Access
2002 Laboratory Animal Care, Handling and Suture Methods
1999 – 2002 Bachelor of Science – Biotechnology (with Honours)
1990 – 1997 Extracurricular language studies in Polish
1985 – 1998 Schooling, including completion of the HSC

EXPERIENCE (SCIENTIFIC)

- 2008 – [...] **Research Assistant (on Secondment)**
Bacterial Pathogenesis Laboratory, CIDM, Sydney
Study of bacteria with multiple resistance genes in ICUs
- 2006 – [...] **Technical Officer, Grade 2 (Grade 1 up to Sept 2007)**
Molecular Biology Laboratory, ICPMR, Sydney
Extraction of bacterial and viral DNA/RNA for analysis by PCR
- 2003 – 2005 **Microarray Scientist**
Cytogenetics Lab, Hunter Area Pathology Service, Newcastle
Production, implementation, and data analysis of microarrays
- 2002 – 2003 **Demonstrator in Molecular Genetics**
Biology Department, University of Newcastle
Requiring excellent communication skills targeted at students
- 2001 – 2003 **Research Assistant and Industrial Experience**
Centre for Biotechnology & Development, University of Newcastle
Animal handling and dissection, data gathering and data entry

EXPERIENCE (ADDITIONAL)

- 2005 **Web Designer and Secretary**
Web Dimensions, Central Coast
Web development and administrative tasks including client service
- 2002 – 2005 **Casual Retail Assistant**
Calendar Club, Charlestown Square
Customer service, stocktaking, cash handling
- 1996 **Work Experience in Nursing**
Obstetric and Surgical Units, Belmont District Hospital
Assistance and observation in patient care and comfort

EXPERIENCE (ADDITIONAL) *continued*

1994 **English Language Teacher**
Wrocław, Poland
Teaching conversational English to school-aged children

PROFESSIONAL CONTRIBUTIONS

Publications (peer-reviewed)

Aitken RJ, Bennetts LE, Sawyer D, **Wiklendt AM**, King BV. Impact of radio frequency electromagnetic radiation on DNA integrity in the male germline. **Int J Androl.** 2005; **28**(3):171-9.

Sawyer DE, Mercer BG, **Wiklendt AM**, Aitken RJ. Quantitative analysis of gene-specific DNA damage in human spermatozoa. **Mutat Res.** 2003; **529**(1-2):21-34.

Presentations

David Mowat, Kerry Fagan, Joan Dawes, Ian Dawes, **Agnieszka Wiklendt**, Bronwyn Robertson, Rohan Willams, Rodney Scott, Michael Buckley, Gillian Turner. “*THE “CHROMARRAY” GROUP*”. DECIPHER Symposium held at the Wellcome Trust Genome Campus, Hinxton, England, **23-25 June 2005**.

Agnieszka Wiklendt, Katie Baines, Kerry Fagan, Gillian Turner, The ChromArray Group, “*Application of CGH Microarray Analysis for the Detection and Delineation of Unbalanced Chromosome Abnormalities*”. 10th Interim Meeting of ASoC held in Hobart, Australia, **March 2004**. (oral)

Posters

Wiklendt A, Lawrence O, Anderson J and The Chromarray Consortium. “*Production Of A 1 Mb Microarray For Analysis Of Chromosome Copy Number Changes By Array CGH*”. Annual conference of the Human Genetics Society of Australasia, held in Newcastle, Australia, **25-29 July 2005**.

Workshops

Array CGH Workshop (Wet): Participated as co-coordinator and presenter to approximately fifteen international participants including: introduction, supervision, explanation, and discussion on data analysis of CGH Microarrays. Held at the Hunter Area Pathology Service, Newcastle, **30th July 2005**.

Theses

A. M. Wiklendt “Effects of Radio Frequency Electromagnetic Radiation on Male Germ Cells of Mice (*Mus musculus*) *in vivo*.” Submitted **28/10/02** as part of the B.Sc.(Biotech)(Hons) Degree at the University of Newcastle, Australia.

AWARDS

- 2004** *Ed Krumins Young Scientist Award* (with small scholarship) for my oral presentation at the 10th Interim Meeting of the Australasian Society of Cytogeneticists
- 1997 – 1998** Unbroken attendance (HSC – St Francis Xavier’s College)
- 1997** Distinction in *The Rio Tinto Australian Science Olympiads*, Biology National Qualifying Examination for Year 11 students
- 1995** Merit for Academic Excellence in Science

SKILLS

Scientific

Molecular techniques

- Reverse Line Blot, including probe coupling to membrane
- DNA extraction from human, murine, bacterial and viral sources:
 - of total nucleic acids from: sputums; aspirates; swabs; tissues (fresh/paraffin embedded); blood and blood products (including Guthrie cards); cultures; cerebrospinal, vitreous, amniotic, knee and other fluids; urines; bone marrows; and spermatozoa
 - using salt extraction, phenol/chloroform, boil or column methods
 - using robotic, centrifugation kits, and automated methods
- DNA amplification and manipulation including:
 - real-time multiplex-tandem PCR using a Corbett RotorGene machine
 - real-time duplex PCR using the SmartCycler system
 - real-time PCR using a Roche LightCycler machine
 - sub-typing of microbes using restriction enzymes on PCR products
 - sub-typing of microbes using ERIC PCR
 - determining directionality of an insert in a plasmid by PCR
 - manual quantitative PCR of large targets (up to 10.4 kilo bases)
 - degenerate oligo-primed (DOP) PCR and nick translation
 - optimisation of these techniques
- Gel electrophoresis including:
 - agarose and polyacrylamide gels using various buffers (TBE/TAE)
 - pulsed-field (bacterial subtyping, determining integrity of dsDNA)
 - alkaline (to determine ssDNA breaks)
 - neutral (to determine double-stranded and/or super-coiled DNA quality, quantity, and size)
 - documentation of images using digital and Polaroid systems
- Microarray (genomic) use, including:
 - chip construction (custom in-house on Corning UltraGAPS slides)
 - chip preparation and hybridisation
 - scanning and data analysis, followed by data interpretation
- Fluorescent techniques, including:
 - (the above mentioned real-time PCR applications)
 - labelling of DNA with in-house or various commercial probes
 - using DOP-PCR and Nick translation for labelling
 - Zeiss fluorescent microscopes with MetaSystems software
 - software for digital fluorescent image capture and enhancement
 - use of various fluorescent dyes including: Cy3, Cy5, A488, PicoGreen

- for accurate DNA quantitation, *in-situ* hybridisation, protein detection

Microbiology/Cellular techniques

- Transformation of competent cells
- Growing of bacteria on various selective/nutrient plates and in various broths
- Preparation of plate and broth media, and making plates, including antibiotic
- Preparation of meta-/inter-phase slides of cell cultures for cytogenetic analysis
- Dark field, light field, fluorescent, some confocal microscopy
- Haemocytometer use and calculations

Technical and Other Laboratory skills

- Preparation of broth and agar media for streaking plates
- Bioinformatics
- Report and document filing and retrieval
- Producing and updating documentation (Standard Operation Procedures (SOPs), Material Safety Data Sheets (MSDSs))
- Reagent mixing, gel making, compliance with OH&S for chemical labelling, handling, and disposal (including handling of hazardous substances)
- Glassware and equipment care, cleaning, and maintenance
- Version control and backing up of computer generated files

Animal handling in the Laboratory

- Handling, care and observation
- Administration of anaesthetics (subcutaneous, intra-muscular/venous)
- Various methods of suturing
- Dissection of male rodent reproductive organs and isolation of spermatozoa
 - Using cannulation by specialised (safe!) mouth pipette
 - Using perforation and forced extraction under BWB in mineral oil

Communication

- Typing skills of 57 wpm at 100% accuracy (certified July 2006)
- Excellent language skills in English and Polish, and basic German
- Co-Presenter and Co-coordinator of the 2005 HAPS Microarray Workshop
- Successful oral presentation at the 44th Annual Australasian Society of Cytogenetics Conference held in Hobart, Tasmania 2004
- Demonstrator of second year Molecular Genetics labs, which included discussions with the class as a group, and individually with students
- Successfully defended thesis and presentation in seminar conditions
- Many dealings with clients, colleagues and sales representatives via telephone, conference calls, email, and VoIP (Voice over Internet Protocol) software

Computer

- MS Windows (most versions from 3.11 to Vista), MS Office and MS Works
- Alternatives to Microsoft products including OpenOffice
- Statistical software (SigmaPlot)
- Fluorescent image capture programs: MetaSystems, Multianalyst, GenePix Pro
- Databases such as MS Access, AUSLAB, CRS and Cerner PathNet
- Scientific websites such as Pubmed, ensemble, and discussion forums
- Website Design including Macromedia software and FTP programs

- Image editing software such as Paintshop Pro, Adobe Photoshop and Gimp

LEISURE ACTIVITIES and OTHER INTERESTS

Sporting kayaking, squash, walking, cycling, softball, horse riding

Reading quantum physics, science biographies, numeracy, human psychological development, thriller, sci-fi, fantasy, poetry

Other web design, database design, Japanese culture; cooking; gardening

REFERENCES

References withheld online