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UNH 's Ellsworth Gift Funds Student's Research Project in Australia

By [Sharon Keeler](#)
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DURHAM, N.H. -- Meghan Ainsworth of Londonderry was the first recipient of a University of New Hampshire International Research Opportunities Program award now funded annually by a gift from the Gerald M. ('49) and Jane Campbell ('50) Ellsworth Endowed Fund for International Study.

After a year of working with UNH faculty mentor Stacia Sower, Ainsworth, a biochemistry major, spent part of last year in Australia conducting research under the direction of MacQuarie University professor Jean Joss. Her independent research project was aimed at improving her molecular biology skills.

"Molecular biology is the study of microscopic building blocks that make up an organism, such as DNA," Ainsworth explains. "The field of molecular sciences expands into many other scientific arenas, one of which is the study of evolution."

Ainsworth's project focused on identifying a hormone that has remained conserved over millions of years. This hormone, released in a region of the brain, controls reproductive behavior. Her model animal was the Australian lungfish.

"Over billions of years, organisms have transformed from tiny single-cell creatures into hundreds of billions of cells, such as humans," says Ainsworth. "Somewhere in this lineage lies the Australian lungfish. This particular fish is proposed by scientists to be the branching species between aquatic fish and tetrapods, such as frogs and lizards."

By using molecular biology techniques, Ainsworth

worked on extracting this hormone and deciphering its genetic code.

Ainsworth says that managing a research project on her own, in another country, allowed her to gain invaluable experience.

"Culturally, Australia was fascinating," she says. "With a population mainly derived from immigrants within this last century, I not only experienced the traditional Australian culture, but also those of the Croatians, Chinese, Japanese and Indians."

Ainsworth says when she finished her 40-hour work week in the laboratory, she enjoyed visiting museums and film festivals, as well as shopping in the weekend markets and talking with artisans and local cooks.

"I am most grateful to have the experience of traveling abroad," Ainsworth says. "It has helped me grow in many ways, and I now am looking to the future with much less fear, and a lot more confidence."

The Gerald and Jane Campbell Ellsworth Endowed Fund for International Study will fund two UNH study abroad scholarships each year.

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