Pre-Med Research Experience

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Reasons to do undergraduate research

• Get a good(better) letter of evaluation
• Get experience discerning anecdotal data from significant data, a valuable skill for any career
• Many admissions officers are scientists as well
• Any connection during interviews is a good thing– common ground, conversation starters
• The practice of medicine has elements of the scientific method embedded in it.
Ms. Elli Mae was a student in my Moonshine 101 class in the fall of 2009. She took my class on a Credit/Non-Credit basis and passed the class. Ms. Mae attended class regularly and turned in the assignments on time. Elli Mae has a pleasant personality, is mature, cooperative and a good listener. I feel she is capable of doing better than her grades indicate. I feel that with proper training and mentorship she will make a good health professional.

I wish her well in her endeavors,
I have come to know Jethro well these last three years. I have known him as a student in my Advanced Hillbilly Culture class at the University of Montana, and as both a student and leader in the Global Undergraduate Pre-med program. (This last is a self-run student program to give undergraduates and opportunity to volunteer with medical providers in the developing world.)

Jethro is, as his resume makes clear, is an accomplished student, athlete, and leader. I have found him inquisitive, thoughtful, personable, and remarkably resourceful: note the number of programs he participated in, often as a leader. He would make an excellent physician. I recommend him wholeheartedly.
I have known Jethro since Spring of 2009. He approached me initially because of his interest in the work I am doing in partnership with physicians on the Ipso Facto Indian Reservation and he expressed an interest in joining my lab. He offered to volunteer several hours per week and that relationship has grown now to include his own independent project in my laboratory.

Jethro is a very pleasant, hard-working student with a very positive attitude. He is very persistent, methodical, and skilled at communication. His work on lab projects has been exemplary and has helped to advance the goals of the laboratory. This fall, he helped to reestablish order in our database and clinical sample storage systems. He performed well mastering several techniques new to him. These included isolation of genomic DNA from human blood samples, quantitation and aliquoting of DNA at various concentrations, PCR, allele specific restriction digests, capillary electrophoresis. When the instructions that I gave left room for some decision-making, he took the initiative and made good choices. It is very easy to develop trust in his abilities in a short time. His work has contributed to one presentation at a National meeting so far and his work will be submitted to a high impact journal as part of a large multi-institutional study of the pharmacogenetics of a tribal population.
The following faculty expressed an interest in having pre-health professions students gain laboratory experience in their labs.

Richard **Bridges**- role of glutamate transport in neuropathology

Andrij **Holian**- asthma, lung fibrosis and chronic obstructive pulmonary disease.

Diana **Lurie**- Stroke, CNS injury, lead exposure

Nick **Natale**- anticancer drug discovery, anticonvulsant screening, diabetes

Mark **Pershouse**- genetics of cancer, cancer in medically-underserved populations

David **Poulsen**- stroke, traumatic brain injury, epilepsy, deafness

Elizabeth **Putnam**- Asthma, lung fibrosis, respiratory disease, cancer, medically-underserved populations
Research Opportunities by Disease

**Cancer**-Mark Pershouse, Liz Putnam, Rich Bridges

**Diabetes**-Nick Natale

**Neurodegenerative Disease**- Rich Bridges

**Traumatic Brain Injury**-David Poulsen, Diana Lurie, Rich Bridges

**Epilepsy**-Nick Natale, David Poulsen

**Stroke**-David Poulsen

**Deafness**-David Poulsen

**Toxic Exposures**-Diana Lurie, Liz Putnam, Mark Pershouse, Andrij Holian

**Asthma**- Liz Putnam, Andrij Holian

**Lung Fibrosis**-Andrij Holian, Liz Putnam

**Medically-underserved populations**-Liz Putnam, Mark Pershouse
Additional DBS Faculty experienced in undergraduate research

• Scott Wetzel
• Steve Lodmell
• Scott Samuels
• Mike Minnich
• Jim Gannon
• Bruce Bowler
• Mark Grimes
• Jesse Hay
How to Join a Research Lab

• Identify faculty with interests similar to yours
• Stop by their lab/office to talk
• Set up an appointment by email
• Offer to volunteer for a defined period as a trial
• Do well
What you should expect

• Publications-in the best of cases
• National Meeting presentations-certainly
• Regional Meeting presentations-always
• Course credit-if you need it
• Senior Honor’s Thesis-Yes
• A better understanding of research and the mindset of many admissions committee members