College of Natural Science and Mathematics

Degree Candidates
Joan Braddock, Dean

Baccaulaureate

Seth Adams	B.S.	Biological Sciences
Darren A. Asuncion	B.S.	Computer Science
Rebecca Baird	B.S.	Biological Sciences
Christopher Paul Barger	B.S.	Biological Sciences
James R. Becwar	B.S.	

Elise Glenn

Aaron Luptak *cum laude, Honors Program, Golden Key Honor Society*	B.S.	Computer Science
Scott Macfarlane	B.S.	Computer Science
Stephanie D. Maggard	B.A.	Naturopathic Chemistry: Interdisciplinary Program
Jeffrey M. Mann	B.S.	Mathematics; Physics
Clifford Manning	B.S.	Computer Science
Ryan McAllister	B.S.	Mathematics
Lisa M. McGilvary *cum laude*	B.S.	Biological Sciences
Cody Mutchler	B.S.	Computer Science
Dayna Norris	B.S.	Biological Sciences
Michael W. Nowakowski	B.A.	Earth Science
Chelsea Dianne Paskvan *Honors Program*	B.S.	Chemistry: Biochemistry/Molecular Biology
Shanna Katharine Patterson	B.S.	Biological Sciences
Charles R. Pengilly	B.A.	Mathematics
Christopher John Peterson	B.S.	Biological Sciences

Benjamin James Andrews *B.S., University of Oregon, 2002*	M.S.	Geology
Sean Patrick Bemis *Honors Program* *B.S., University of Alaska*		

B.S., University of Iceland, 1997
M.S., University of Iceland, 1999

Thesis: Coseismic Deformation of the 2001 El Salvador and 2002 Denali Fault Earthquakes from GPS Geodetic Measurements
GPS geodetic measurements are used to study two major earthquakes. For the 2001 Mw7.7 El Salvador earthquake, six continuous operating GPS stations in Central America are used to constrain earthquake parameters. For the 2002 Mw7.9 Denali Fault earthquake, 232 GPS sites in Alaska and Canada are used to reveal a detailed slip distribution.

Major Professor: Dr. Jeffrey T. Freymueller

Prasad R. Joshi Ph.D. Biochemistry and Molecular Biology

B.S., Unversity of Bombay (India), 1998
M.S., University of Bombay (India), 1999

Thesis: Structure-Function Studies of the Serotonin Type-3 Receptor Ligand-Binding Domain
The 5-HT3R, an ion channel, mediates physiological processes in nervous, cardiovascular and digestive systems. Our studies explored the contribution of binding site loops B and E to the mechanism of channel gating in the 5-

Kevin Petrone Ph.D. Biological Sciences: Biology

B.A., Hampshire College (Massachusetts), 1993

Thesis: Export of Carbon, Nitrogen and Major Solutes from a Boreal Forest Watershed: The Influence of Fire and Permafrost
Detailed chemistry observations were used to determine the role of fire, permafrost and snowmelt processes on element fluxes from interior Alaskan catchments. Fire had a short term effect on stream chemistry, and hydrochemical differences were found between watersheds due to permafrost, suggesting that Alaskan watersheds may be fundamentally different from their boreal and temperate counterparts.

Major Professors: Dr. Richard Boone and Dr. Jeremy Jones

John Jairo Sanchez-Aguilar Ph.D. Geophysics

B.S., La Universidad Caldas (Colombia),1996
M.S., University of Alaska Fairbanks, 2000

Thesis: Volcano Seismology from Around the World: Case Studies from Mount Pinatubo (Philippines), Galeras (Colombia), Mount Wrangell and Mount Veniaminof (Alaska)