**APPLICATIONS DEVELOPER**

David Fackler

**Courses:** Computer Science, Applied Math

**JOB DESCRIPTION**

The Applications Developer plans and writes custom software applications for the lab instruments to collect data in a database making it possible for scientists to retrieve the data for their research. Also, trains scientists and staff to use software applications.

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**CAPTAIN**

Steve Bradley

**Maritime Navigation, Mechanical Engineering**

**JOB DESCRIPTION**

The Captain directs all ship functions, drives and navigates the ship, and ensures the safety of everyone on board.

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**DOCTOR**

Jeffery "Doc" Hernandez M.D.

**Courses:** Medical Sciences

**JOB DESCRIPTION**

The Ship’s Doctor prepares for different medical emergencies including: heart attack, stroke, broken arms and cut fingers. The Doctor keeps track of the nearest hospitals on land and sometimes must call for a helicopter for emergency transport.

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**PROJECT MANAGER**

Adam Klaus

**BA in Geology, MS in Geology, PhD in Marine Geology and Geophysics**

**JOB DESCRIPTION**

The Project Manager leads the project team that plans and carries out the expedition, conducts research, participates in education activities, and manages research activities during the expedition to make sure the scientific goals are met.
EXpedition 345: Hess Deep Rift
Dec 2012 - Feb 2013
joidesresolution.org
PHOTOGRAPHER

William (Bill) Crawford

Courses: Photography

JOB DESCRIPTION
The Photographer photographs every drill core, documents each expedition by taking pictures of the staff, scientists, operations, and celebrations; helps the scientists with imaging systems, and takes photos of broken equipment so it can be repaired properly.

ASSISTANT LAB OFFICER

Lisa Crowder

M.A. in Geological Sciences

JOB DESCRIPTION
The Lab Officer and Assistant Lab Officer manage the marine laboratory specialists and research specialists; makes sure the labs are prepared and functioning well for the scientists to do their work; and helps scientists with their work.

MARINE COMPUTER SPECIALIST

Michael Hodges

Courses: Computer Science

JOB DESCRIPTION
The Marine Computer Specialist makes sure all of the computers and databases on the ship work; teaches scientists how to use the computer equipment on board; and tests new computer programs and technologies.

MARINE INSTRUMENTATION SPECIALIST

Randy Gjesvold

Courses: Computer Science, Electronics, Mechanics, Math

JOB DESCRIPTION
I keep equipment working in the labs; train staff on board to use equipment; set up and test tools that takes measurements; performs inspections; fixes broken equipment; helps design new equipment for scientists; and makes sure that data is accurate.
EXPEDITION 345: HESS DEEP RIFT
dec 2012 - feb 2013
joidesresolution.org

Graphic Design by Nicole Kunkel
**MARINE INSTRUMENTATION SPECIALIST**

Garrick Van Rensburg

**Courses:** Computer Science, Electronics, Mechanics, Math

**JOB DESCRIPTION**

I keep equipment working in the labs; train staff on board to use equipment; set up and test tools that takes measurements; performs inspections; fixes broken equipment; helps design new equipment for scientists; and makes sure that data is accurate.

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**MARINE CURATORIAL SPECIALIST**

Chad Broyles

**Courses:** Geology, Oceanography, Chemistry, Math

**JOB DESCRIPTION**

The Marine Curatorial Specialist manages collecting, handling, sampling, storing, and shipping all cores aboard the ship; teaches staff how to collect data from the cores; and keeps track of samples taken by the scientists in a database.

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**OPERATIONS SUPERINTENDENT**

Michael Storms

**Courses:**

**JOB DESCRIPTION**

The Operations Superintendent oversees drilling operations during expeditions to make sure the scientific goals are achieved; communicates the needs of the scientists to the ship’s drilling crew; keeps records of daily operations, and deals with shipboard equipment maintenance and repair.

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**PUBLICATION SPECIALIST**

Tim Fulton

**Courses:**

**JOB DESCRIPTION**

The publication specialist prepares data that comes from the ship labs for the publication department on shore, which publishes scientific articles so that other scientists, legislators, teachers, students, and the public can learn from scientific findings.
EXpedition 345: Hess Deep Rift
dec 2012 - feb 2013
joidesresolution.org
**Tool Pusher/Core Technician**

Joe "Bubba" Attryde

Courses: Mechanics

**Job Description**

The Tool Pusher/Core Technician is responsible for the drill floor; oversees the mechanics of the drilling process; repairs and builds tools necessary for each job; and stays educated on new technical equipment used in the drilling business.

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**Co-Chief Scientist**

Kathryn M. Gillis

PhD in Marine Geology

**Job Description**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.

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**Co-Chief Scientist**

Jonathan Snow

PhD in Geology

**Job Description**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.

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**Structural Geologist**

George Geuleneer

PhD in Igneous Petrology

**Job Description**

The Structural Geologist will describe the structure of the cores, both the ones we can see with the naked eye and those that we discover under the microscope.
**STRUCTURAL GEOLOGIST**

Michael Cheadle

Courses: Structural Geology, Petrology, Geophysics

**JOB DESCRIPTION**

The Structural Geologist role on-board understands the physical processes involved in the crystallization of magma in the crust.

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**METAMORPHIC PETROLOGIST**

Kathrin Faak

Courses: Ocean Crust

**JOB DESCRIPTION**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.

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**PALEOMAGNETIST**

Sarah A. Friedman

Courses: Geology

**JOB DESCRIPTION**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.

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**PALEOMAGNETIST**

Andrew J. Horst

Courses: Structural Geology, Paleomagnetism

**JOB DESCRIPTION**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.
**SPECIALIST**

Benoit Ildefonse

Courses: Petrophysics, Structural Geology

**JOB DESCRIPTION**

The Specialist will be measuring physical properties of rocks.

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**STRUCTURAL GEOLOGIST**

Barbara E. John

PhD in Structural Geology and Petrology

**JOB DESCRIPTION**

This Structural Geologist will be looking at the core once on deck.

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**IGNEOUS PETROLOGIST**

Juergen H. Koepcke

Courses: Petrology

**JOB DESCRIPTION**

The Ingeous Petrologist will be staring through a microscope trying to understand what the rocks did.

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**METAMORPHIC PETROLOGIST**

Naomi E. Marks

Courses: Geochemistry

**JOB DESCRIPTION**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.
**Metamorphic Petrologist**

Marie Python

Courses: Petrology

**Job Description**

Scientists on the JR study the rocks and sediment, water, environment, and life in the deep sea.

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**Inorganic Geochemist**

Romain Meyer

PhD in Igneous Petrology and Petrology

**Job Description**

The Inorganic Geochemist uses scientific equipment to break up rocks to burn in solution in a plasma to determine its composition.

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**Marine Lab Specialist**

Margaret Hastedt

Courses:

**Job Description**

The Marine Lab Specialist operates the scientific instruments onboard and prove round-the-clock technical and database support.

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**Educator/Teacher**

Jean-Luc Berenguer

Courses: Biology and Geosciences

**Job Description**

The Educator/Teacher keeps in touch with the continents by transferring the news of the expedition ‘from the deep ocean crust to the sea shore!’
EXPEDITION 345: HESS DEEP RIFT
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**EDUCATOR/TEACHER**

Susan Gebbels

Courses: Education and Outreach

**JOB DESCRIPTION**

This Educator/Teacher is responsible for dissemination of research findings and development of education materials.

**ARTIST/TEACHER**

Nicole Kurtz

BFA in Scientific Illustration

**JOB DESCRIPTION**

The Artist/Teacher will work with the scientists and other teachers on board to create educational games, toys, activities, and illustrations for classrooms on shore.

**NAVAL ARCHITECT**

name:

Courses:

**JOB DESCRIPTION**

The Naval Architect helps redesign the ship when it needs to be fixed or upgraded; oversees and plans the rebuilding process; and makes sure the ship meets research requirements for different expeditions.

**SECOND MATE**

Jake Robinson

B.A. Maritime College J.D. in Maritime Law

**JOB DESCRIPTION**

The Second Mate is responsible for navigation of the ship.
**Offshore Installation Manager**

*Job Description*

The Offshore Installation Manager is in charge of drilling operations including safety, firefighting, fueling, and navigation at and around the drill sites; manages ordering for the ship's drilling supplies, and works with the entire drill team to problem solve when a situation happens.

**Radio Operator**

*Job Description*

The Radio Operator takes and sends weather data to Washington D.C. every six hours; sends and receives radio transmissions from shore; and repairs radio equipment.

**Welder**

*Job Description*

The Welder uses heat to shape and attach metal pieces of equipment for building new tools; repairs broken parts; and attaches large equipment to different parts of the research area for conducting investigations.

**Logging Engineer**

*Job Description*

The Engineer designs, builds, and tests mechanical and electronic tools needed for scientific drilling and measurement operations and provides engineering support during drilling.
CHIEF COOK

JOB DESCRIPTION

The Chief Cook manages the kitchen and cooking staff; orders and keeps track of food; plans meals, cooks, and cleans the kitchen (galley).

DRILLER

JOB DESCRIPTION

The Driller controls machinery that keeps the drilling equipment stable and balanced when the ship is moving from side to side and makes sure the drilling equipment is at the right location to send pipe and drill bit to the bottom of the ocean.