



**HALLIBURTON**

Landmark

# SEG/HALLIBURTON EVOLVE

Rekha Patel

## SEG/HALLIBURTON EVOLVE

Early Career Preparedness aimed at asset-based integrated learning for students and ECP in the oil and gas industry

# Motivation

- SEG/Halliburton have created **EVOLVE**, industry's first interdisciplinary educational initiative embedding;
  - Halliburton's vision for collaborative and integrated approach to asset-team performance and,
  - SEG's 2014 acceleration to advance their approaches to serve students and Early Career Professionals (ECP) to solve a fundamental membership challenge.
- EVOLVE is founded on developing and delivering next generation geoscience, petrophysical, reservoir characterization and engineering workflows in a modern learning environment appealing to the generation of professionals who are now starting their careers in the oil and gas industry



Open Learning Virtual Education System

**HALLIBURTON** | Landmark

# What Primed our Mission?

## Characteristics of our Industry...

- Rapid Changes – in Opportunities, in Societal Pressures, in Size of datasets, in Global Politics, in Oil Price, ...
- The critical Role of Technology – Reflection Seismology/Sensing/Measurement/Monitoring Technologies, Drilling Technologies, Completion/Production Technologies, ...
- The importance of “Efficient” Operations – Improved HSSE, More Difficult HC Access, Improved Recovery, End-to-End integration, ...

*In order to better cope with these characterizations of our Industry, today's Geoscientists must be well-rounded in their awareness and knowledge in many aspects of other disciplines!*

## Mission

■ Create practical supplemental learning to help students and ECP (early career professionals) understand how geophysics integrates throughout the E&P life cycle and consequently, the importance of collaborative cross-disciplinary interaction across varied disciplines.

- *Multi-disciplinary subsurface integration*

■ EVOLVE will deliver to participants, a focused integrated learning option enabling them to prime their skill set to make immediate contribution to real world problem-solving exposure in a virtual environment

- *Providing requisite knowledge to students and ECP in wider range of fields including multiple aspects of geology, geophysics, engineering and economics required by employers*

## Bestow to industry

- A novel model delivering broad multi-disciplinary learning among early career Geophysicists

*Input from industry stakeholders and universities*

- Independent baseline best practices for each discipline
- New ideas and approaches to improve/enhance workflows
- Improved software work practices that drive more efficient and safer operations
- Enriched interaction between SEG and other professional organizations to promote cross-disciplinary training
- Sustainable number of “graduates” that are recognized as pacesetters in integrated subsurface evaluation

## EVOLVE Benefits for Participants

- Collaboration across disciplines to appreciate each discipline's contribution in company assets for improved decision making
- Strengthen participants' knowledge about multidisciplinary technologies in the industry, such that they may be more effective when addressing global scientific problems
- Work with, and learn from, a remarkable group of peers
- Deepen analytical and problem-solving skills
- Hone ability to lead, excel in project reporting and technical presentations, and work as a member of a team
- Develop social connections and network with industry experts

# EVOLVE POC – EVOLVE2015



# EVOLVE2015 POC - Target Participants

## Proof of Concept – EVOLVE2015

Participation is open to select schools depicted below and by invitation only



ECP team will be internal comprising participants from HAL PSLs

**HALLIBURTON**

# Team Structure

- University/Company advisors will serve as primary contact for their institution and assist facilitating EVOLVE2015 POC
- Each participating asset-team will consist of a cross disciplinary group of students and early career professionals led by a University or Company advisor ideally comprising;
  - Geophysicists
  - Geologists
  - Engineers
  - Petrophysicists
  - Rock physicists

# Advisor Responsibilities

- Be able and willing to assume primary responsibility to create, guide and advise their institution's team throughout the life of each project
  - Connect students and create cross-disciplinary team for their institution
  - Act as liaison between EVOLVE communities/management
  - Manage notifications, registration at [seg.org/apply](http://seg.org/apply),
  - Provide guidance to meet key milestones and reach planned toll gates
- Enable collaboration, mentor and guide participants directly and through online communities/forums to be built for EVOLVE
- Attend planned progress presentations/reviews by team members and provide guidance to team to prepare their formal presentations

# EVOVLE2015 - Registration Process/Timeline/Sharing

## POC 2015 Registration

### ■ Registration rests with SEG

- \*.edu email for US applicants for Students
  - Complimentary Membership set-up for students
- Company email for Early Career Professionals
  - Associate Membership/proof of employment required for ECP

### ■ E-Registration with Access Code

- Advisor(s) will receive Access Code from SEG to distribute to team

# EVOLVE2015 Timelines

- Registration: 1 August - August 15
  - Registration is now open at [seg.org/apply](http://seg.org/apply)
  - Registration closes 28-August 2015
- Advisors and approved participants will receive cloud access on 1-September
- EVOLVE review/presentations at SEG annual meeting: 19-20 October
- SEG EVOLVE2015 Recognition: 21 October. 1:30 p.m.

# EVOLVE2015

Participants will receive and have access through EVOLVE

- Cloud-environment with necessary training and software toolkits
  - DecisionSpace Platform and Products
- Prototypical multi-disciplinary datasets for project use only
  - Deepwater dataset
- Structured training, workflows and online coursework in cross-disciplinary subsurface evaluations
- Industry counseling and mentors to support, access and direct individual progress
- Access to peer networks where social learning and teamwork can be exercised

# EVOLVE CONTACTS

## SEG

- Johnna Yoder, Student and Early Career Advisor
  - [jyoder@seg.org](mailto: jyoder@seg.org)
- Elsa Paul, Manager, Student and Early Career Programs
  - [epaul@seg.org](mailto: epaul@seg.org)

## Halliburton

- Rekha Patel, Ecosystem Evangelist
  - [Rekha.patel@halliburton.com](mailto: Rekha.patel@halliburton.com)
- Shyamali Balasubramaniyan, Program Volunteer
  - [Shyamali.balasubramaniyan@halliburton.com](mailto: Shyamali.balasubramaniyan@halliburton.com)