Preparing students for college sciences and health professions

REGIONAL ALLIED HEALTH & SCIENCE INITIATIVE (RAHSI) – San Diego County

Natalie Ray, Program Director
REGIONAL ALLIED HEALTH & SCIENCE INITIATIVE (RAHSI) – San Diego County

RAHSI is primarily supported by the State of California
Governor’s Career-Technical Education (CTE) Initiative

Our project is hosted by Grossmont-Cuyamaca Community College District
WHAT’S YOUR PROBLEM?

- Lack of awareness regarding career opportunities
- Limited availability of science prerequisite courses (Anatomy & Physiology, Microbiology)
- High attrition rates in prerequisite courses
- Long waiting lists
- Availability of faculty
- Limited clinical placements
- High attrition rates in licensure/training programs
- Workforce retention
WHAT IS RAHSI?

RAHSI supports the building and implementation of middle and high school Health Career Pathway programs in San Diego County.

Our Focus

- Countywide collaboration among high school & college educators, administrators, and local business
- Health and medical curricula in the academic sciences
- Student internships and other career exploration opportunities
- Teacher/counselor externships and professional development
Students that complete a RAHSI Health Career Pathway course sequence will be prepared to pursue ANY health training program of their choice, from technician to physician.

RAHSI preparation is intended for students of ALL academic levels and backgrounds.
RAHSI GOALS

• Increase middle and high school students’ awareness of health career opportunities

• Improve performance in high school and college science courses

• Improve transition and retention rates in college and health occupation programs of choice
HEALTH CAREER PATHWAY DEFINED

For RAHSI:

A sequence of academic and Career-Technical Education (CTE) courses that infuse health/medical content and applications into the curricula over a three or four-year period.
HEALTH CAREER PATHWAY DEFINED

The RAHSI Course Sequence

- Medical Biology
- Medical Chemistry
- Medical Anatomy & Physiology
- Culminating/Practicum Course
- *Minimum* Algebra II Math

RAHSI courses are UC/CSU admissions-friendly!!

Course Codes and UC Program Status are currently being pursued.
San Diego County's Regional Allied Health and Science Initiative (RAHSI) - Active Partner Sites

**East County - Grossmont Union High School District**
1. El Cajon Valley
2. Granite Hills
3. Grossmont
4. Helix Charter
5. Mt. Miguel High School - Academy of Medical and Health Sciences (Specialized Secondary Program)
6. Santana
7. West Hills

**South County - Sweetwater Union High School District**
8. Castle Park
9. Eastlake
10. Mar Vista
11. San Ysidro
12. Southwest High School - California Partnership Academy
13. Sweetwater

**Metro Area - San Diego Unified School District**
14. Hoover
15. Patrick Henry
16. San Diego High Complex - School of Science and Technology (Sci Tech)

**North County - Various Districts**
17. Mission Hills
18. Ramona
19. Valley Center
20. Vista

**Middle School Partners**
- Magnolia Science Academy, San Diego (formerly Momentum Charter)

**Higher Education Partners**
- A. Cuyamaca College
- B. Grossmont College
- C. Grossmont Health Occupations Center
- D. MiraCosta College
- E. Palomar College
- F. San Diego City College
- G. San Diego Continuing Education
- H. San Diego Mesa College
- I. SDSU
- J. Southwestern College
- K. UCSD
Leading to...

TRAINING PROGRAMS

- Colleges
- Universities
- Adult Education/ROP

For example:
- Anesthesia Technology
- Cardiovascular Technology
- Disability Services Management
- EKG Technician
- Medical Offices Management
- Nursing (RN), (LVN)
- Occupational Therapy (OT)
- Physical Therapy (PT)
- Orthopedic Technology
- Respiratory Therapy
- Surgical Technology
RESULTS OF RAHSI MODEL - example

California Standardized Testing & Reporting - Biology Score Results & Comparisons 2008-09

Valley Center High School, San Diego County – Health Career Pathway

Comparison of CST Biology Proficiency Scores

Comparison of CST Biology Approximate Mean Scores

Valley Center Medical Biology Student Gender (n=73)

Valley Center Medical Biology Student Grade Level (n=73)

Comparison of Student Race/Ethnicity

Prepared by Regional Allied Health and Science Initiative
May 2010
RESULTS OF RAHSI MODEL - example

California Standardized Testing & Reporting - Biology Score Results & Comparisons 2008-09

Castle Park High School, San Diego County – Health Career Pathway

Comparison of CST Biology Proficiency Scores

Comparison of CST Biology Approximate Mean Scores

Castle Park Medical Biology Student Gender (n=22)

Castle Park Medical Biology Student Grade Level (n=22)

Comparison of Student Race/Ethnicity

Prepared by Regional Allied Health and Science Initiative May 2010
FACES OF RAHSI
GROWING THE FUTURE WORKFORCE

• Values of Service, Problem-Solving, and Collaboration

• A single course or activity is not enough to ensure success in “gatekeeper” college science coursework
  - General Biology, Anatomy, Physiology, Microbiology, Chemistry (commonly prerequisites to health programs)
BENEFITS OF RAHSI MODEL

- Similar student “product” to promise colleges & industry
- Increased awareness and experience with health sector career opportunities (and adult training programs)
- More qualified, informed student and worker
- Decreased attrition rates in licensure/training programs
- Reduction in workforce gaps
- Improved workforce retention
IN THE BEGINNING...

- Inventory of schools with health pathway programs
- Ask for commitment to participate in the development and implementation of Medical Biology
- Talk directly to science teachers
- Countywide “Collaboration Workshops”
- $5000 to each participating high school
CHALLENGES

- State standards: “No room for more”
- Science teachers willing...but (usually) limited healthcare background
- Counselor awareness
- Movement from course to course
- CTE vs. “Academic”
- a-g approval for CTE courses
RESOURCES FOR YOU

- Medical Biology curriculum
- Medical Chemistry curriculum
- Medical Anatomy & Physiology
- Medical Theory & Practice practicum course: in progress
- Internship Toolkit
- www.RAHSI.org
RAHSI Informational Tool | RAHSI Stakeholder PPT | RAHSI Promo Materials Postcard/Mousepad

**Program Coordination**
- Current Year RAHSI Calendar
- RAHSI Site Activity Participation
- Grant Reporting Log MS / HS
- Pathway Parent Night Toolkit A-G
- Grant Equipment Inventory Logs

**Surveys**
- Middle School Pathway Teams
- High School Pathway Teams
- Seventh Grade Science Students
- Medical Biology Students
- Eighth Grade Science Students
- Medical Chemistry Students

**Forms and Templates**
- Middle School Brochure Template
- HS Pathway Brochure Template
- RAHSI Site Profiles/Funding Application
- Middle School Templates APP / Interest Card
- HS Pathway Application Template
- CST Data Collection Template
- Middle School Consent Form ENG / ESP
- HS Pathway Consent Form ENG / ESP
- RAHSI Services Order Form

**Curriculum**
- also refer to Curriculum and Lab Assignment Links for Teachers & the Message Board for additional suggestions
- RAHSI Course Sequence
- Medical Anatomy & Physiology
- Medical Biology
- Capstone/Practicum
- Medical Chemistry
- Math & English

**Industry Toolkits**
- Building Internships A to Z
- Healthcare Industry Standards
- RAHSI Internship Best Practices
- Workplace Readiness Exercises
- Professionals in the Classroom
- HIPAA Preparation Exercises

**Project Evaluation**
- 2008-09 Phase II Final Report
- Fall 2008 Stakeholder Interview Report
- 2008-09 Phase I Final Report
- Fall 2007 Student Evaluation Results
- California Standardized Testing (CST) Results

"All resources posted on this website are for classroom or research purposes only, and may not be used or distributed for profit. RAHSI is not responsible for the content of other websites. To report offensive content at any posted link herein, please contact the webmaster."
Resources
www.RAHSI.org/tools.htm

Industry Toolkits
Building Internships A to Z
Healthcare Industry Standards
RAHSI Internship Best Practices
Workplace Readiness Exercises
Professionals in the Classroom
HIPAA Preparation Exercise

RAHSI Internships A to Z
0 Cover Page
1 Table of Contents
2 RAHSI Intern Program Employer Toolkit CD Labels

A RAHSI High School Intern Program Model
B Employer Timeline-Checklist
C Recommended Duties & Opportunities
D Suggested Department Rotations
E California Child Labor Laws
F Student Selection Criteria
G Internship Information
H Sample Promotional Flier
I Student Application Checklist
J Student Application Form

K Teacher Recommendation Form
L Student Application Scoring Rubric
M Selection Committee Scoring Spreadsheet
N Interview Letter
O No Interview Letter
P Interview Questions
Q Internship Acceptance Letter
R Consent to Photograph and Videotape
S Internship Declined Letter
T Pre-Internship Survey
U Post-Internship Survey (revised)
V Employer Evaluation
W Intern Worksheet-Health Occupations Exploration
X Student Activities Log
Y Guidelines for Final Presentations
Z Sample Certificate of Completion
Takes a Village...

Natalie Ray, Project Director
Janet Hoff Kneier, Project Manager
Daynah Hooper-Robledo, Project Specialist
Sonia Lira, Industry Connections Coordinator
Diana Barajas, Middle School Connections Coordinator
Heather Peterson, Curriculum Coordinator/
GUHSD Health Pathway Coordinator
Darci Kimball, Curriculum Specialist
Kim Brooks, GC Health Professions Outreach Coordinator
Sany Ramirez, SWC Health Professions Outreach Coordinator
Palomar College Tech Prep, North County Health Pathway
Funding and Coordination
Jenny Lambert-Palmer, Evaluation &
Community Engagement Coordinator
For more information about becoming a RAHSI friend or partner,

Contact:

Natalie Ray,
Program Director
619-644-7826
natalie.ray@gcccd.edu

Please visit us at www.RAHSI.org