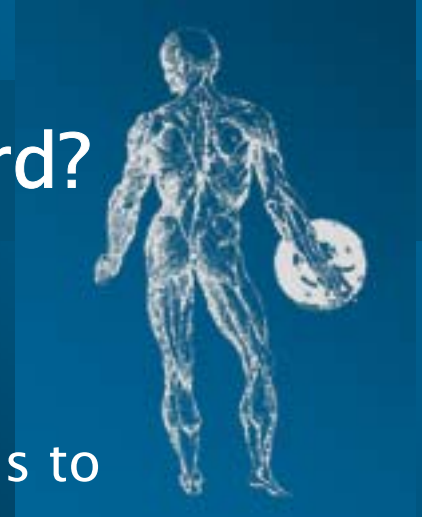# Slice of Life 2003
Student Software Award

Drexel University and the University of Pennsylvania, Philadelphia, PA, USA

About the Student Software Award?

- **Purpose**
  - Acknowledge medical student contributions to software development

- **Eligibility requirements**
  - Medical student or Intern project that is submitted while still a student or intern. Software application must be freely available or available for purchase at a nominal price.

2003 Judging Committee

- Included teaching faculty, librarians, multimedia developers at the University of Utah . . .

2003 Judging Committee

- Rick Ash, Prof. Neuroanatomy, Univ Utah
- Don Blumenthal, Prof. Pharmacology, Univ Utah
- Suzanne Stensaas, Prof. Neuroanatomy, Univ Utah
- Sharon Dennis, Librarian Multimedia Development, PI KW Project
- Paul Burrows, Producer, KUED Media Solutions, Univ Utah
- Jeanne LeBer, Librarian Education, Eccles Library, Univ Utah
- John Bramble, Librarian Outreach, Eccles Library, Univ Utah
- Derek Cowan, Multimedia Design, Video Engineer, Eccles Library, Univ Utah
- Valeri Craigle, Multimedia Designer, KW project Eccles Library, Univ Utah
- Susan Roberts, Multimedia Designer; KW Project, Eccles Library, Univ Utah

Judging Criteria –1

- Content
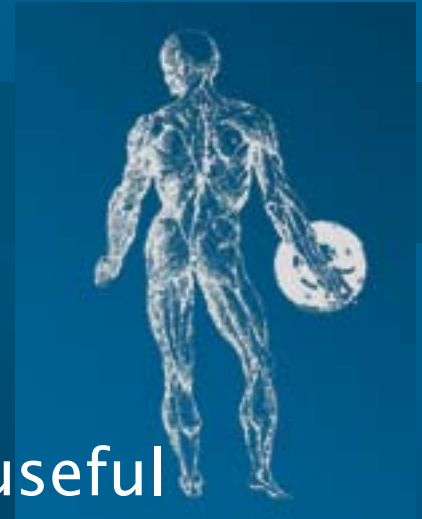 - Purpose and usefulness to intended audience

Judging Criteria –2

- User interface and navigation
    - Easy to use?

Judging Criteria –3

- Interactivity
  - Personalized user experience with useful feedback

Judging Criteria -4

- Graphic design
  - Is the application visually well-designed?
  - Easy to view?
  - KISS (Keep It Short and Simple) principle applied?

Judging Criteria –5

- Effective use of multimedia
  - Use of graphics, charts, diagrams, video, audio, etc. that add to the user experience

Judging Criteria –6

- Novelty
  - Fills a need not already met; solves a problem

Judging Criteria –7

- Universality
  - Allows for a range of learning styles; useful to a wide-audience; ADA compliance

Judging Criteria –8

- Evaluation
  - Has usefulness of application to intended audience been evaluated?

Judging Criteria –9

- Role of student in project
  - Significant student role in project

2003 Student Software Submissions

- 11 total submissions
- Formats:
  - Dynamic Web-based applications, CD ROM, DVD, PDA
- Categories:
  - Pediatrics, Neurology, Ophthalmology , General Medicine, Embryology, Anatomy, Surgery, Human Developmental Biology, Physiology, Internal Medicine, Cardiology
- They are . . .

2003 Student Software Submissions

- Neurological Eye Simulator / Virtual Patient Simulator
  - Richard Lasslo
  - University of California Davis Medical School
  - Web-based application
  - This application simulates eye motion and demonstrates the effects of disabling one or more of the 12 eye muscles and one or more of the 6 cranial nerves that control eye motion. The latest eye simulator includes animated demonstrations of neurological eye testing with voice narrative, expanded quizzes, and a case based interface for simulating virtual patients with eye pathologies.
  - DEMO

2003 Student Software Submissions

- Pediatric Board Game: A web-based board game to teach pediatrics
  - Jeremy Kendrick
  - University of Utah and West Virginia University
  - Dynamic website
  - A software tool has been created to simulate a board game such as "chutes-and-ladders".
  - DEMO

2003 Student Software Submissions

- **Disease Activity Score (DAS) Rheumatolgy**
  - Dorine Borensztajn
  - University of Nijmegen
  - Application for: Palm, Pocket PC, Psion, Web, Standalone
  - With this application you can calculate and monitor the disease activity if patients with a rheumatic disease.
  - Download software

2003 Student Software Submissions

- Acute Clinical Medicine Reference Guide
  - Dorine Borensztajn
  - University of Amsterdam
  - Application for: Palm, Pocket PC, Psion, Web, Standalone
  - Contains guidelines for nearly 100 clinical situations
  - Download software

2003 Student Software Submissions

- **3D Embryo**
  - David Orloft and Hanna Reuterborg
  - Dept of Cellular abd Molecular Biology, Medical Nobel Institute
  - Dynamic Web site
  - Combines 3D animation and highly interactive 3D web technology to visualize the early development of a human being.

2003 Student Software Submissions

- Respiratory Physiology: Respiratory Response to Exercise
  - Yanko Michea
  - University of Texas Health Science Center at Houston, School of Health Information Sciences
  - Web-based application
  - Teach concepts of physiology using interactive multimedia.

2003 Student Software Submissions

- Neurological Teaching Videos
  - Geethanandh Kandasamy
  - Wright State University
  - Dynamic website
  - Provides a resource of videos of neurologically diseased patients for neuroscience educators

2003 Student Software Submissions

- **CardioCalc**
  - Du Yang
  - St. Michael's Hospital
  - Palm OS Application
  - CardioCalc is a PalmOS calculator with over 50 commonly used formulas in cardiovascular medicine. It is designed to assist physicians, nurses, pharmacists, technologists, technicians and other allied health professionals in the field of cardiovascular medicine to perform essential day-to-day calculations accurately and efficiently.

2003 Student Software Submissions

- **Project LIVE: Twins Case**
  - Amy Hansen
  - University of Colorado Health Sciences Center
  - DVD application
  - Project Live is a Web/ CD-ROM based authoring program that allows us to create rich problem based leaning (PBL) cases using digital video so that students at dispersed clinical sites can participate in on-line PBL learning groups with a faculty facilitator. The DVD version of LIVE makes it possible to conduct video cases with face-to-face groups anywhere you can bring a laptop and an LCD projector.

2003 Student Software Submissions

- Aplicacion de la computacion al adiestramiento de la Colecistectomia Video Endoscopica
  - Danley Brooms Menendez
  - Univ. Hospital Miquel Enriguez
  - Multimedia application on CD ROM
  - Allows learning of new surgical techniques; designed to complement training programs in hospitals.

2003 Student Software Submissions

- **Instructional Interactive Dissection Guide**
  - Matthew Inwood an Jamil Ahmad
  - Royal College of Surgeons in Ireland
  - Multimedia application on CD ROM and Internet
  - Comprised of 75 separate programs, each corresponding to a dissection class for students at the RCSI. Provides instruction for a complete dissection from head to toe based on dissection instructions written by RCSI faculty. Designed to complement lectures and the RCSI anatomy workbook.
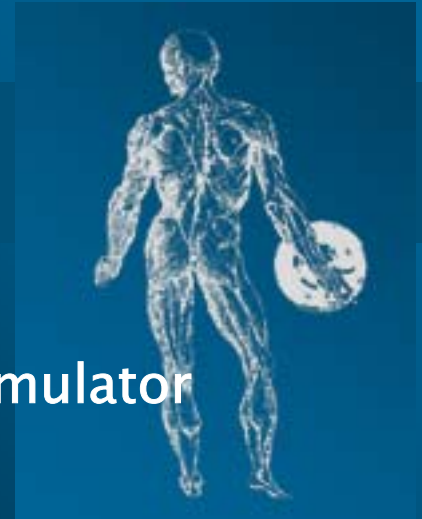
And the winners are . . .

- 3 Winners
  - "Mature" project: $1000
    - Neurological Eye Simulator / Virtual Patient Simulator (Richard Lasslo)
  - Current Student: $500
    - Pediatric Board Game: A web-based board game to teach pediatrics (Jeremy Kendrick)
  - PDA: $500
    - Disease Activity Score (DAS) Rheumatolgy (Dorine Borensztajn)

"Mature" Project

- Neurological Eye Simulator / Virtual Patient Simulator
  - Richard Lasslo
  - University of California Davis Medical School
  - Web-based application
  - This application simulates eye motion and demonstrates the effects of disabling one or more of the 12 eye muscles and one or more of the 6 cranial nerves that control eye motion. The latest eye simulator includes animated demonstrations of neurological eye testing with voice narrative, expanded quizzes, and a case based interface for simulating virtual patients with eye pathologies.
  - DEMO

Current Student

- Pediatric Board Game: A web-based board game to teach pediatrics
  - Jeremy Kendrick
  - University of Utah and West Virginia University
  - Dynamic website
  - A software tool has been created to simulate a board game such as "chutes-and-ladders".
  - DEMO

PDA

- Disease Activity Score (DAS) Rheumatolgy and
- Acute Clinical Medicine Reference Guide:
  - Dorine Borensztajn
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  - Application for: Palm, Pocket PC, Psion, Web, Standalone
  - DAS : with this application you can calculate and monitor the disease activity if patients with a rheumatic disease.
  - ACMRG: Contains guidelines for nearly 100 clinical situations
  - Download software
  - DEMO

Thank you!