

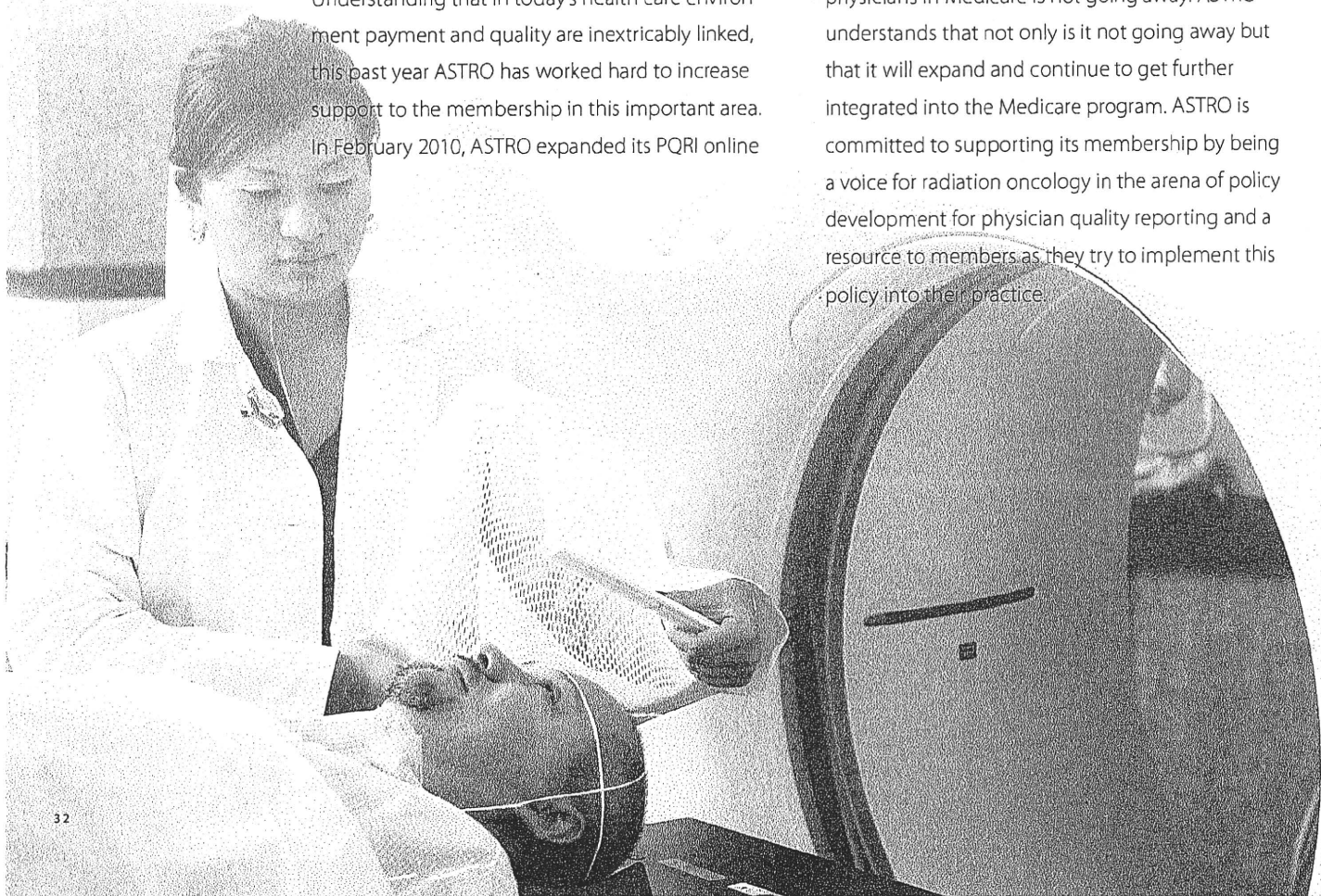
ASTRO works to support members as they meet increasing quality reporting demands

Created in March 2007, the Medicare Physician Quality Reporting Initiative (PQRI) established a financial incentive for eligible health care professionals to participate in a voluntary quality reporting program. Physicians and other eligible health professionals who satisfactorily report on quality measures are eligible to receive a financial bonus as well as confidential feedback information. Implementing a quality reporting program that is both relevant and limits the disruption to physician-patient workflow for physicians has been an enormous challenge for the Medicare agency. Since PQRI's introduction to the Medicare program, ASTRO has worked closely with the Centers for Medicare and Medicaid Services (CMS) and other medical specialty societies to help improve PQRI.

Quality reporting and measurement are a growing part of the Medicare payment formula. Understanding that in today's health care environment payment and quality are inextricably linked, this past year ASTRO has worked hard to increase support to the membership in this important area. In February 2010, ASTRO expanded its PQRI online

resource center. For the first time, data collection sheets for radiation oncology PQRI measures were available for free download from the ASTRO website. In June 2010, ASTRO co-sponsored a call for members with CMS and the American Society of Clinical Oncology (ASCO) on the PQRI program. Call participants heard from Medicare agency staff as well as ASTRO and ASCO members who have successfully participated in PQRI. The specific PQRI oncology measures were also addressed on the call. Over 150 individuals participated in this free educational conference call. Finally, throughout the year ASTRO updated membership on changes and updates to the PQRI program.

Recent health reform legislation reflects a growing emphasis on measuring and incentivizing quality, and moving forward the PQRI program will surely continue to evolve. Quality reporting for physicians in Medicare is not going away. ASTRO understands that not only is it not going away but that it will expand and continue to get further integrated into the Medicare program. ASTRO is committed to supporting its membership by being a voice for radiation oncology in the arena of policy development for physician quality reporting and a resource to members as they try to implement this policy into their practice.



Treasurer's Report

In May 2010, ASTRO's independent auditors, Squire, Lemkin + O'Brien LLP, conducted an audit of ASTRO's 2009 consolidated financial statements. The completed audit report includes consolidated statements of activities, financial position and cash flows for ASTRO and the Radiation Oncology Institute (ROI). Squire, Lemkin + O'Brien LLP, have expressed an unqualified "clean opinion" for these financial statements.

ASTRO's Finance/Audit Committee reviewed the report in detail with the auditors and submitted it to the Board of Directors, where it was approved in June 2010.

CONSOLIDATED STATEMENT OF ACTIVITIES

ASTRO and ROI had a combined \$3.5 million loss in 2008—the result of a \$5.7 million loss in investments and a \$2.2 gain in operations. By comparison in 2009, ASTRO and ROI had a combined \$6.6 million gain—the result of a combined \$5.8 million gain in investments and an \$800,000 gain in operations. Long-term investments performed well in both relative and absolute terms in 2009 participating fully in the equity market rally that began in March 2009.

The 2008/2009 economic environment affected ASTRO's Annual Meeting and other small meetings causing reductions in registration, exhibits and corporate support. However, ASTRO's virtual meetings more than doubled 2008 sales as members were forced to cut back on travel expenses but were still eager to participate in ASTRO's many learning opportunities.

Expenses were also trimmed in response to the economic climate as ASTRO staff and volunteers put forth significant effort to reduce 2009 and future years' expenses. A hiring freeze for new positions was instituted in 2009. Travel related expenses and outside professional services were also greatly reduced.

CONSOLIDATED FINANCIAL POSITION

As of December 31, 2009, ASTRO and ROI combined had \$34.4 million in assets and \$3.3 million in liabilities. Of the \$34.4 million in assets, the Board designated \$13.25 million for special projects, of which \$3.45 million has been spent through 2009 and \$9.8 million remains for future years. These projects include the ROI Vision of Value campaign, guideline developments, practice accreditation, a self-referral study and expanded learning initiatives. These should all benefit the future practice of radiation oncology and the cancer community in general. ASTRO is in a strong financial position to achieve its mission.

LAURIE E. GASPAR, M.D., M.B.A., FASTRO
ASTRO Secretary/Treasurer



Consolidated Balance Sheet

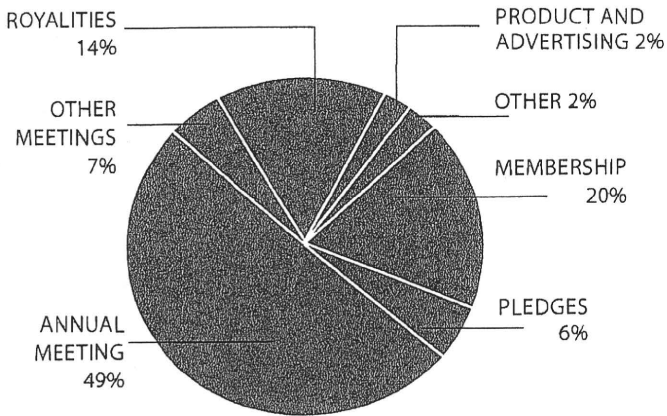
	DECEMBER 31	
	2009	2008
ASSETS		
CURRENT ASSETS:		
Cash	\$1,527,359	\$492,002
Short-term Investments	3,658,474	3,406,381
Long-term Investments		
U.S. Large Cap Stocks	8,375,359	6,882,738
U.S. Small Cap Stocks	2,170,941	1,048,644
International Stocks	5,520,878	3,852,103
Fixed Income	6,162,727	5,708,791
Alternative Investments	2,496,071	2,064,770
Accrued Interest Receivable	41,824	56,232
Accounts Receivable	956,262	881,653
Pledges Receivable, Net of Discounts	2,096,060	2,133,890
Prepaid Expenses	953,525	247,149
TOTAL CURRENT ASSETS	<u>\$33,959,480</u>	<u>\$26,774,353</u>
PROPERTY AND EQUIPMENT, NET	<u>\$388,444</u>	<u>\$501,556</u>
DEPOSITS	<u>\$24,733</u>	<u>\$80,359</u>
TOTAL ASSETS	<u><u>\$34,372,657</u></u>	<u><u>\$27,356,268</u></u>
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES:		
Accounts Payable	\$1,412,478	\$1,662,330
Accrued Expenses	535,935	544,564
Deferred Revenue/Expense	1,311,572	675,639
TOTAL LIABILITIES	<u>\$3,259,985</u>	<u>\$2,882,533</u>
NET ASSETS:		
Unrestricted		
Undesignated	\$19,224,845	\$10,253,255
Board Designated Programs	9,791,767	12,002,461
Total Unrestricted	<u>29,016,612</u>	<u>22,255,716</u>
Temporarily Restricted	2,096,060	2,218,019
	<u>\$31,112,672</u>	<u>\$24,473,735</u>
TOTAL LIABILITIES AND NET ASSETS	<u><u>\$34,372,657</u></u>	<u><u>\$27,356,268</u></u>

Consolidated Profit and Loss Statement

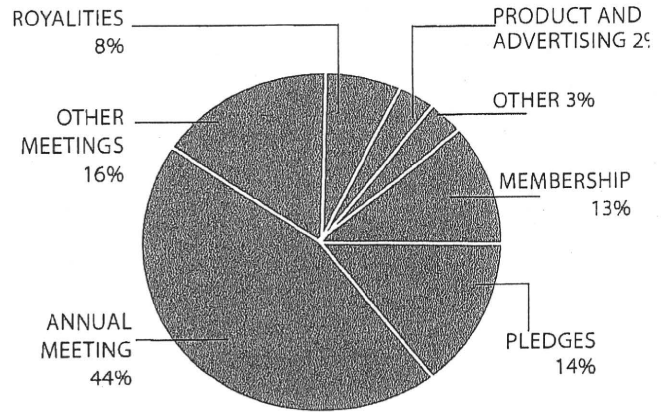
	FOR YEARS ENDED DECEMBER 31	
	2009	2008
REVENUE AND SUPPORT:		
MEMBERSHIP	\$2,934,915	\$2,410,448
MEETINGS		
Annual Meeting	\$7,244,156	\$7,915,262
Other Meetings	986,788	2,834,725
Total Meetings	\$8,230,944	\$10,749,987
OTHER		
Pledges	\$831,929	\$2,529,570
Journal Royalties	2,087,561	1,507,631
Products	91,988	219,096
Advertising	178,268	204,040
Other	327,259	434,728
Total Other	\$3,517,005	\$4,895,065
TOTAL REVENUE AND SUPPORT	\$14,682,864	\$18,055,500
EXPENSES:		
MEETINGS		
Annual Meeting	\$3,426,828	\$3,686,633
Other Meetings	991,582	2,475,956
Meetings and Education Support	390,790	406,266
Total Meetings	\$4,809,200	\$6,568,855
COMMITTEES	\$815,010	\$1,089,558
PROGRAMS		
Health Policy	\$981,407	\$1,195,651
Government Relations	845,898	774,260
Research and Awards	943,844	957,196
Public Awareness and Relations	410,459	359,247
Publications	258,684	327,416
Other Programs	537,614	405,286
Total Programs	\$3,977,906	\$4,019,056
SUPPORTING SERVICES		
General and Administrative	\$2,853,667	\$2,779,666
Membership	730,562	733,138
Board of Directors	673,183	643,441
Total Supporting services	\$4,257,412	\$4,156,245
TOTAL EXPENSES	\$13,859,528	\$15,833,714
Profit/(Loss) From Operations	\$823,336	\$2,221,786
INVESTMENT INCOME/(LOSS)	\$5,815,601	\$(5,676,845)
INCREASE/(DECREASE) IN NET ASSETS	\$6,638,937	\$(3,455,059)

Total revenue before investment income

2009 Revenue

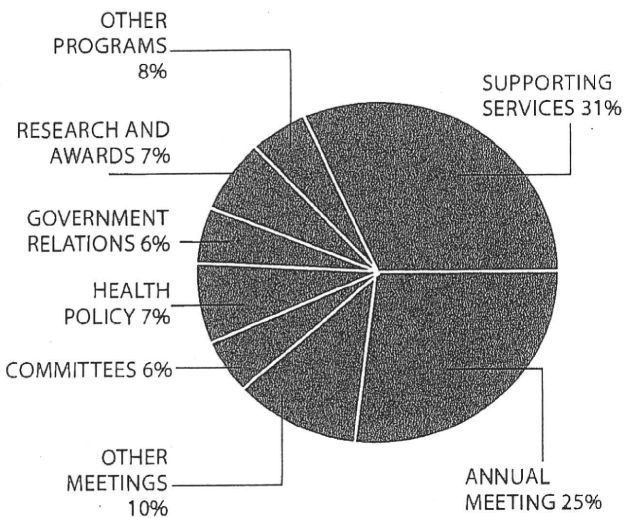


2008 Revenue

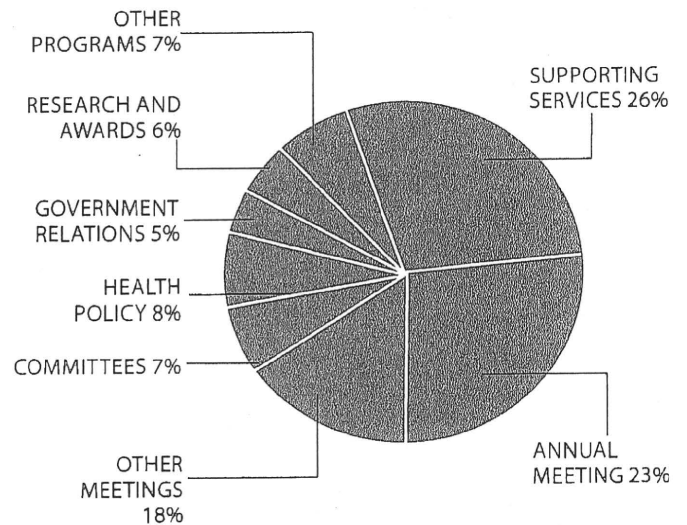


Total expenses

2009 Expenses



2008 Expenses



Demonstrating safety and effectiveness of radiation therapy for the future of cancer treatment

Taking stock of ROI's Year in Review is one of seeing long- and well-planned building blocks begin to provide solid ground and traction for realizing ROI's mission and purpose:

"The Radiation Oncology Institute will enhance and promote the critical role of radiation therapy in the treatment of cancer by supporting research and education that demonstrates the life-saving and quality-of-life benefits of radiation therapy."

THE INSTITUTE'S PRIMARY OBJECTIVE IS TO:

"Conduct objective research to document the value, safety, efficacy and cost effectiveness of radiation therapy."

ROI'S PACE OF PROGRESS IS QUICKENING:

- Hired its first full-time director, dedicated completely to fulfilling the needs of the radiation oncology community. On April 1, Tracy Casteuble began her duties at ROI to carry out research projects to begin to achieve our goals.
- A collaborative project with RTOG that will compare outcomes of treatment for prostate cancer with either IMRT or 3D-CRT, providing hard data for best practices.
- Commencement of a significant study to assess and prioritize what ROI's national research agenda should be, according to interviews with many stakeholders.
- Start-up efforts to build a data dictionary and database registry of treatment and outcomes for cancer patients will help to make significant improvement in determining which treatments are associated with the best outcomes, allowing all involved parties the capability to use common data elements, to extract uniform EMR information of basic demographics on cancer patients.

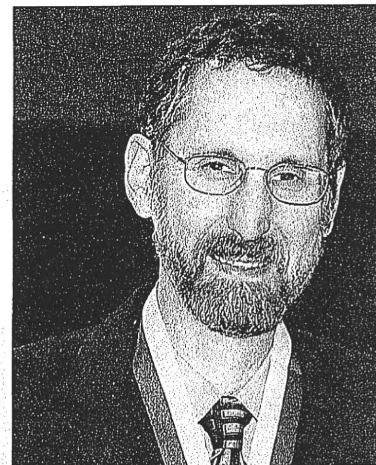
This is an exciting time for the ROI as plans for research projects move into execution phase. The ROI Board approved the Development Master Plan prepared by the Development Committee, which calls for doubling the ROI endowment to \$16 million by 2014.

I would like to remind you that no other organization except our own will support efforts to gather and disseminate evidence that radiation therapy is a non-invasive, effective and safe therapy! I encourage each of you to stay abreast of ROI's activities and make a contribution to ROI's mission that is critical to the health of our patients and the future of our field.

Sincerely,

Theodore S. Lawrence, M.D., FASTRO
President

Colleen Lawton, M.D., FASTRO
Vice-president



Demonstrating safety through research

PIVOTAL ROI RESEARCH WILL SET AGENDA FOR FORESEEABLE FUTURE

A first-ever ROI study of the research gaps in radiation oncology, the ROI National Research Needs Assessment in Radiation Oncology, is in progress. After extensive review and vetting by the ROI Research Committee, co-chaired by Stephen Hahn, M.D., and Reshma Jagsi, M.D., D.Phil., ROI's Board of Trustees chose the Yale New Haven Health Center to conduct the study.

The Yale Center is gathering perspectives on key issues from radiation oncologists, biologists, physicists, referring physicians, patients, and payers. Issues and sub-topics identified will be prioritized by criteria, such as the magnitude of impact a topic may have, its prevalence and the degree of improvement that research in a given topic area could have. Laying this groundwork will be the cornerstone of ROI's research agenda to support radiation oncology for the next several years.

Using results from this assessment, ROI will be able to design and contract out future research based on the best recommendations of many experts in radiation oncology. Subsequent research will help fill gaps in the body of knowledge about radiation oncology. Results from the assessment should be available in late spring of 2011.

DATABASE REGISTRY FOR RADIATION ONCOLOGY

Two committees formed to lay the groundwork for creating a registry in radiation oncology that will collect standardized data about cancer treatments. A key component of the endeavor will be designing the infrastructure and data taxonomy of the database itself. The ROI Registry Task Force convened a meeting in St. Louis in March to discuss ideas for such a registry and created a proposal outlining ways to do it. The proposal was presented to the ROI Board of Trustees as well as to the ASTRO Board of Directors. The Boards agreed that ROI and ASTRO should collaborate on creating these two committees, the steering and data dictionary committees, and then proceed to explore developing the database and registry.

Data from such a registry for radiation oncology would answer one of the profession's priority needs:

- Assessing effectiveness of treatments by comparing data and analysis that demonstrate links between treatments with the best outcomes, safety, efficacy and cost-effectiveness.

Radiation therapy provides life-saving and exceptional clinical benefits to cancer patients, but very little aggregated clinical data exists to demonstrate these benefits. The creation of standardized data elements, taxonomy and infrastructure would be a tremendous contribution to the field since data from electronic medical records could be extracted in a consistent, comprehensive way. Pending funding for the initiative, a pilot demonstrating use of the taxonomy through data extraction and aggregation would mean a big step toward widespread adoption.

COLLABORATIVE PROJECT WITH RTOG TO STUDY TREATMENTS FOR PROSTATE CANCER

This project with RTOG to analyze a multi-institution database over a six-year time period will fill a significant gap in the research on effective treatments for prostate cancer. It will include three aims:

Specific Aim 1: To analyze whether IMRT has lower grades or greater toxicity for GI, GU or other normal tissue compared to 3D-CRT treatment of men with prostate cancer. The typically higher dosage in IMRT to a more targeted site will be an important element in the analysis.

Specific Aim 2: To analyze whether IMRT treatment results in higher quality of life (as measured by erectile, bowel and bladder function, and general quality of life) at specific post-treatment intervals as compared to high dose 3D-CRT.

Specific Aim 3: To assess correlations among CTC toxicity criteria, patient reported outcome (absolute scores and changes in scores) and treatment plan dosimetry.

Results of this important research for treating prostate cancer will be presented at several scientific meetings in 2011.

A first-ever ROI study of the research gaps in radiation oncology, the ROI National Research Needs Assessment in Radiation Oncology, is in progress . . . Using results from this assessment, ROI will be able to design and contract out future research based on the best recommendations of many experts in radiation oncology.

ROI Founder's Circle

With grateful appreciation we acknowledge the generosity of our distinguished investors.

INVESTORS - \$2,000,000+

American Society for
Radiation Oncology
(ASTRO)
Varian Medical Systems

VISIONARY - \$1,000,000+

Elekta

TRUSTEES - \$250,000+

The Juan A. del Regato Foundation
Deborah A. Kuban, M.D.

BENEFACTORS - \$100,000+

Carl R. Bogardus Jr., M.D.
Daniel Dosoretz, M.D.
Dr. and Mrs. John Halligan
Louis B. Harrison, M.D.
James Peter Hoey
Joseph and Suzanne Jachinowski
Theodore S. and Wendy W. Lawrence
Colleen and Patrick Lawton
Christopher and Randi Rose
Kevin L. Schewe, M.D., FACRO

PATRONS - \$50,000+

K. Kian Ang
T.J. Blair, M.D., Ph.D., FACRO
James D. Cox and Ritsuko Komaki-Cox
Ron DiGiàimo
Thomas J. and Alison M. Eichler
Patricia J. Eifel and James A. Belli
Jeffrey D. and Miriam L. Forman
Leonard L. and Katheryn V. Gunderson
Stephen and Lota Hahn
Francine E. Halberg
Jay R. Harris
Feng-Ming (Spring) Kong, M.D., Ph.D., M.P.H.,
and Jian-Yue Jin, Ph.D.
Bruce McAllister, M.D.
Jeff M. and Sheila M. Michalski
Radiation Business Solutions/
Dan Moore
University of Maryland Radiation
Oncology Associates,
PA and William F. Regine, M.D.
Dr. and Mrs. William U. Shipley
Sujatha and Prabhakar Tripuraneni
Terry J. Wall, J.D., M.D.
Timothy Williams, M.D.

MENTORS - \$25,000+

Mitch and Sherry Anscher
David C. Beyer, M.D.
Thomas A. Buchholz
Elinor and Martin Colman
Christopher H. Crane
William E. and Cynthia P. Decker
Silvia Formenti, M.D.
Laurie E. Gaspar, M.D.

Bruce G. and Kathleen G. Haffty
The Hoppe Family
Peter R. Hulick, M.D., FACR, FASTRO
Maria D. Kelly, M.B., B.Ch., B.A.O., FACR
Larry E. and Donna M. Kun
George E. Laramore and
Shelley D. Pemberton
Colleen and W. Robert Lee
Zhongxing Liao
Patrick and Jill Maguire
Lawrence Marks and Caryn Hertz
Minesh P. Mehta
Ruby Meredith
Bruce Minsky and Connie Kissinger
Drs. Benjamin and Tammy Movsas
Jatinder R. Palta
Claudia Perez-Tamayo, M.D., FACR, FACRO
Albert Petty, M.D.
Louis Potters, M.D., and Lenore Brancato, M.D.
Tyvin A. Rich
John W. Rieke, M.D., FACR and
Gene E. Robertson, M.S.
John R. and Theresa M. Russell
Kenneth J. Russell
Christopher and GERALYN Schultz
Dr. Pedro Serrano – Caribbean
Radiation Oncology Center
Joseph R. and Eleanor P. Simpson
Craig W. Stevens
John Suh
"TRI" (Therapeutic Radiologists Inc.)
Kansas City

J. Frank and Vera Wilson
Lynn D. and Nancy G. Wilson
Anthony Zietman, M.D., and
Alison Brookes, M.D.

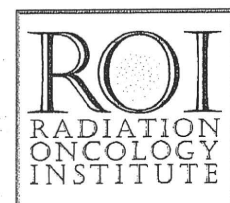
FRIENDS - \$10,000+

Luther W. Brady, M.D., FASTRO
Cheryl G. Reinhardt

OTHER

Robert Amdur
Mary Austin-Seymour
Albert L. Blumberg, M.D.
BrainLAB AG
Theodore L. DeWeese, M.D.
Eli Glatstein
Emily Johnson Grade, M.D.
Sharon and Edward Halperin
Richard P. Hill, Ph.D.
Bharat B. Mittal, M.D.
Susan M. Smith, M.D.
Joel E. Tepper
Laura Ison Thevenot
Kathy Thomas
Christopher Willett

As of September 30, 2010



ASTRO mission

ASTRO is dedicated to
improving patient care
through education,
clinical practice,
advancement of science
and advocacy.

ASTRO

TARGETING CANCER CARE

www.astro.org
www.rtanswers.org

8280 Willow Oaks Corporate Drive

Suite 500

Fairfax VA 22031

1-800-962-7876

總論 DB(含基本 DB, ROGAD)

ROGAD 基本データベース に対する提案

2011.1.8
信州大学 篠田

ROGAD 基本データベース コンセプト

- 実臨床に即した入力内容
- 入力補助を駆使し、入力者の負担を減らすシステム
- さまざまな診療補助ツールにより、利用を促進する

- レイアウトに関する提案
- 入力項目に対する提案
- 入力方法に関する提案
- 使用促進に関する提案

レイアウト

- 初心者にも操作が類推しやすい方法
- ウェブ画面に類似したレイアウト、操作性
- 全体を通じたレイアウトの統一（メニュー構成など）
- ヘルプの充実
- 利用環境に配慮したレイアウト
 - 代表的なモニタ解像度（デスクトップ、ノートパソコン）毎に最適なレイアウトの作成

ナビゲーション

ヘッダ

- デフォルトサイズは 縦 1200 × 横 800 ピクセル
- scriptで書類を開いた際に自動的にサイズ変更
- 各施設で変更可能にする
- 複数のサイズレイアウトを作成しておく
 - 各施設のモニタ事情に対応（ノートパソコンの利用など）
- 最大レイアウトサイズ: A4印刷で全体が印刷される範囲に限定
 - 表示倍率150%でちょうどよいサイズ
- レイアウトマップの作成 (web ページでのサイトマップ)

入力項目に対する提案

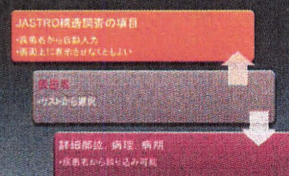
■項目の追加

- 疾患名
- 放射線治療ID
- 住所2 (自由記入欄) / 電話番号
- 放射線治療終了日(外照射・小線源治療)
- 最終修正者氏名, 修正日時
- 自由入力可能なタグ用フィールド

追加提案項目: 疾患名

■疾患名

- 临床上, 紹介が来た際まず必要な情報は**何の疾患か**
 - 現在のDBでの**原発部位**を包含する上位項目として, 疾患名を入力する場所が必要
 - JASTRO構造調査項目(大分類)は, 疾患名から自動入力可能 (demo)
- 他, 疾患名から自動入力, もしくは絞り込みが可能になる項目 (demo)
- 原発部位
 - 病理組織名
 - TNM
 - Stage
 - (予後因子)



追加検討項目: その他

- 放射線治療ID
 - ・病院IDとは別に入力欄が必要
- 住所2 (自由記入欄) / 電話番号
 - ・自動入力欄と分けることで, 誤削除を減らせる
 - ・最終的に住所として統合するフィールドを自動入力 (demo)
- 放射線治療終了日(外部照射・小線源治療)
 - ・開始日とあわせ, 照射日数を自動計算 (小線源治療も同様)
- 自由入力可能なタグ用フィールド
 - ・各施設独自の分類・検索が可能となる (demo)
- 最終修正者氏名, 修正日時
 - ・Filemakerは自動保存されるため, 意図せぬ入力による内容の変更が起こりうる
 - ・最終修正者の名前, 修正日を自動入力できるようにする
 - ・入力エラー原因の説明を容易にするとともに, 入力責任を明確にする
- 外照射方法
 - ・IMRT, SRS, SBRT, 3D-CRTなどの方法を入力する欄を設ける

入力方法に関する提案

- 連続入力を妨げない操作性
 - なるべくポップアップメニューは使用しない
 - リストからの選択は, 短いものならラジオボタン, 長いものはドロップダウンリスト
- ヘルプ機能
 - ポップアップヘルプを使用すると, レイアウトが見やすくなる (demo)

使用促進のための提案

- JASTRO構造調査 E項目の集計が可能となるようにする (demo)
 - 施設のニーズにあわせ, 年別集計, 年度別集計が可能となるようにする
 - ほかの調査項目も入力するデータベース (テーブル)を内蔵する
 - 将来的には, DBからテキスト形式で書き出し, そのテキストを構造調査web上にアップロードすることで登録が可能となるようにすれば利便性が高まる

使用促進のための提案

- 臨床に役立つツールにする
 - サマリ作成機能, 返書(診療情報)作成機能
 - 各施設の要求にどの程度対応できるか
 - 利用施設に欲しい機能のアンケートをとる
- 将来的に, ベンダーの提供するRISから必要な情報を書き出し, それを取り込む機能があればさらなる利用につながるのでは?
 - ベンダーの協力が必要
 - 書き出しフォーマットの共通化
 - 逆に, ROGADデータベースを入力用フロントエンドとして, データを取り込む機能をRISに搭載してもらう

その他

- Filemakerファイルとともに、コンパイルしたスタンドアロン ver.を配布する
- 施設のファイルメーカーのversionに依存しない環境
- 新しい便利な機能に対する対応が素早く可能となる

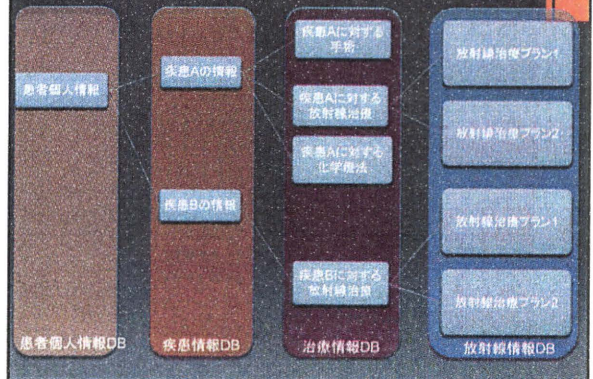
さらなる提案

- 可能であれば、基本DBと各論DBのレイアウトを同一に
- 操作性の統一により入力しやすい環境を作る

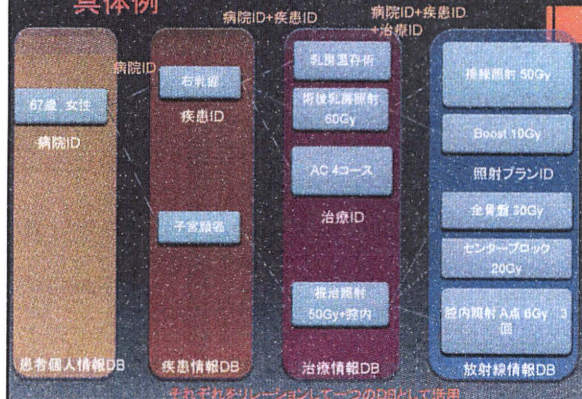
余談: 放射線治療におけるデータ構造について

- 疾患ごとに必要な治療モダリティが異なり、標準化しにくい
- 大きくは外照射, 小線源治療に分類
- 一つの治療(外照射)の中でも、数が限定されない変更が起こりうる
- リレーションを活用した複数のテーブルによるデータベース構築が必要

理想的なデータ構造



具体例



この方法の問題点

- データベースの複雑化
 - データ利用に際し、構造を把握していないとデータの書き出しに手間がかかる
- リンクに用いる項目が誤入力されていた場合、訂正するとリンクがはずれる
- どのレベルのデータを収集するか決定が複雑となる

今後のデータベース作成にあたり

- 検討課題: 疾患名リストの作成
 - どの疾患をリストにするか検討
 - 放射線科的に稀な疾患をどうするか
- 検討課題: 病期分類の選択
 - 各疾患において、どの病期分類を採用するか決定
- DB委員会でのテスト

付記: 疾患リスト私案

JASTRO構造調査原発部位

- | | |
|------------------|------------------|
| ■ 1. 脳・脊髄 | ■ 8. 婦人科 |
| ■ 2. 頭頸部(甲状腺を含む) | ■ 9. 泌尿器系(前立腺以外) |
| ■ 3. 食道 | ■ 10. 前立腺 |
| ■ 4. 肺・気管・縦隔 | ■ 11. 造血器リンパ系 |
| ■ 5. 乳腺 | ■ 12. 皮膚・骨・軟部 |
| ■ 6. 肝・胆・膵 | ■ 13. その他(悪性) |
| ■ 7. 胃・小腸・結腸・直腸 | ■ 14. 良性 |

1. 脳・脊髄

- **脳腫瘍**
 - TNM, 病期分類なし
 - 細目は病理分類で対応
- **脊髄腫瘍**
 - TNM, 病期分類なし
 - 中枢神経腫瘍として、まとめるのも一案

2. 頭頸部(甲状腺を含む)

- | | |
|--|---|
| ■ 眼・眼窩 <ul style="list-style-type: none"> ■ 結膜癌, 網膜芽細胞腫, 結膜/ぶどう膜悪性黒色腫, 眼窩肉腫, 涙腺癌で別分類 | ■ 中咽頭 <ul style="list-style-type: none"> ■ TNM |
| ■ 口唇・口腔 <ul style="list-style-type: none"> ■ TNM ■ 口唇と口腔を分ける? | ■ 下咽頭 <ul style="list-style-type: none"> ■ TNM |
| ■ 舌 <ul style="list-style-type: none"> ■ TNM (口唇・口腔) ■ 口唇・口腔から独立 | ■ 喉頭 <ul style="list-style-type: none"> ■ TNM |
| ■ 上咽頭 <ul style="list-style-type: none"> ■ TNM | ■ 鼻腔および副鼻腔 <ul style="list-style-type: none"> ■ TNM |
| | ■ 大唾液腺 <ul style="list-style-type: none"> ■ TNM |
| | ■ 甲状腺 <ul style="list-style-type: none"> ■ TNM |

3. 食道 5. 乳腺 4. 肺・気管・縦隔

- | | |
|---|---|
| ■ 食道 <ul style="list-style-type: none"> ■ TNM ■ 食道胃接合部が第7版より独立 | ■ 肺・気管・縦隔 <ul style="list-style-type: none"> ■ 肺 <ul style="list-style-type: none"> ■ TNM ■ 気管 <ul style="list-style-type: none"> ■ TNM, 病期分類なし ■ 肺癌にまとめる? ■ 縦隔 <ul style="list-style-type: none"> ■ 胸腺腫/胸腺癌として ■ 病期分類あり(正岡の分類) ■ 胸膜中皮腫 <ul style="list-style-type: none"> ■ TNM |
| ■ 乳腺 <ul style="list-style-type: none"> ■ TNM | |

6. 肝・胆・膵

- | | |
|--|--|
| ■ 肝臓 <ul style="list-style-type: none"> ■ TNM | ■ 肝内胆管癌 <ul style="list-style-type: none"> ■ TNM |
| ■ 胆嚢 <ul style="list-style-type: none"> ■ TNM ■ 胆嚢管含む | ■ 肝外胆管癌 <ul style="list-style-type: none"> ■ TNM ■ 肝門部, 遠位, Vater膨大部で分類が異なる |
| ■ 膵臓 <ul style="list-style-type: none"> ■ TNM | |

7. 胃・小腸・結腸・直腸

- **胃**
 - TNM
 - カルチノイドは別分類
- **消化管間質腫瘍 (GIST)**
 - TNM
- **小腸**
 - TNM
 - カルチノイドは別分類
- **虫垂**
 - TNM
 - カルチノイドは別分類
- **結腸**
 - TNM
 - カルチノイドは別分類
- **直腸**
 - TNM (結腸と共通)
 - 肝門部, 遠位, Vater膨大部で分類が異なる
- **肛門管**
 - TNM

8. 婦人科

- **外陰**
 - TNM
 - FIGOに対応
- **膣**
 - TNM
 - FIGOに対応
- **子宮頸部**
 - TNM
 - FIGO分類は各論で使用
- **子宮内膜**
 - TNM
 - FIGOに対応
 - 子宮肉腫が独立した分類
- **卵巣**
 - TNM
 - FIGOに対応
- **卵管**
 - TNM
 - FIGOに対応

9. 泌尿器系(前立腺以外) 10. 前立腺

- **陰茎**
 - TNM
- **精巣**
 - TNM
- **腎**
 - TNM
- **腎盂および尿管**
 - TNM
- **膀胱**
 - TNM
- **尿道**
 - TNM
- **副腎皮質腫瘍**
 - TNM
- **前立腺**
 - TNM

11. 造血器リンパ系

- **ホジキンリンパ腫**
 - Ann Arbor
- **非ホジキンリンパ腫**
 - Ann Arbor
 - 消化管リンパ腫におけるLugano分類
 - 菌状息肉症における臨床的分類
- **白血病**
 - 類縁疾患含む
- **多発性骨髄腫**
 - 国際病期分類

12. 皮膚科 13. その他

- **皮膚癌**
 - TNM
 - 眼瞼, 悪性黒色腫, メルケル細胞癌は別分類
- **骨**
 - TNM
- **軟部**
 - TNM
- **原発不明癌**
- **小児腫瘍**
 - ウイルムス腫瘍
 - 神経芽細胞腫
 - 横紋筋肉腫

14. 良性疾患

- **バセドウ病**
 - 甲状腺眼症含む
- **翼状片**
- **ケロイド**
- **血管腫**
- **脳動静脈奇形**

総論DB 基本DB, ROGADとの連携・移行

大阪大学大学院医学系研究科
沼崎 穂高

総論DBと基本DBの連携

- 篠田先生提供DB(総論DB)への完全移行
 - 基本DB項目は網羅
- 主な変更点
 - レイアウト
 - 原発部位の上位に疾患名の項目を追加
 - 自由記入欄の追加
 - JASTRO構造調査へのデータ提出機能の追加
 - ヘルプ機能の強化

DB移行に伴う改訂作業(基本DB)

- 過去の基本DBデータのインポート
 - 総論DB項目との整合性の確保
 - インポート時の疾患名自動入力
 - ✓ 過去verには疾患名の項目がない
 - ✓ 原発部位から判別して疾患名を自動入力
- 各自でカスタマイズしている施設への対応
 - 総論DB項目との対応表の作成、公表
 - DB移行の支援(施設への出張含む)

総論DBと各論DBの連携

- 各論DBの在り方
 - データ項目数
基本DB < 総論DB < 各論DB(5疾患に限る)
 - 総論DB項目と各論DB項目の整合性
 - 5疾患以外: 総論DBの項目数を減らす必要なし
- 改訂案
 - 現行の各論DBを残す or 残さない

DB移行に伴う改訂作業(各論DB)

- 現行の各論DBを残す
 - 5疾患: 現行の各論DBを利用
 - 5疾患以外: 総論DBのデータ項目を利用
 - 疾患名入力→基本DB部分以外の表示/非表示
- 現行の各論DBを残さない
 - 総論DB = 基本 + 各論DBのデータ項目
 - 疾患名入力→各論DB部分の表示/非表示
 - 過去verのデータのインポート機能の開発

まとめ

- 改訂の方向性
 - 基本DB+各論DB⇒総論DB+各論DB
 - 基本DB+各論DB⇒総論DB
 - 各論データ項目を総論DBに装填
 - 各論部分はSpecial Studyとして定期的に収集
- メリット・デメリット
 - 操作性の向上
 - JASTRO構造調査へのデータ提供
 - カスタマイズして利用している施設への対応

東邦大学 最新の科学で未来をつなぐ

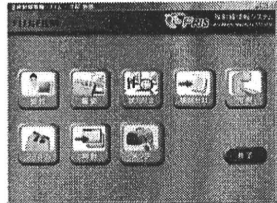
放射線治療RISと診療科DBとの連携構築

東邦大学医療センター大森病院放射線科
寺原 毅 朗

2019年11月10日
東北大学附属病院放射線科放射線治療科 222-2 222-2 222-2 222-2
〒981-8511 宮城県大森市大森1-1-1 大森病院 放射線科 222-2 222-2 222-2
電話：022-820-1111 内線：222-2 222-2 222-2

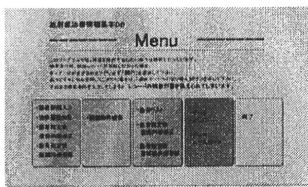
背景

- 放射線治療RISの更新
 - IBM → FUJIFILM
- データベース機能あり
 - 検索
 - 結果の出力
- 但し自由度は低い
- 将来再び放射線治療RISが更新される可能性？
 - データの継続性の問題
- 以前使用していた診療科DBに前任者がデータを入力していなかった
 - DBが複雑、またRISとの二重登録となり、負担が大きかった



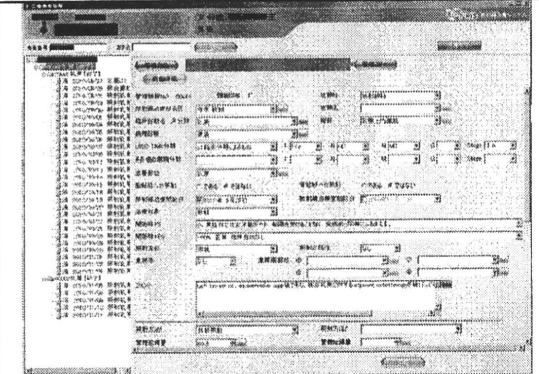
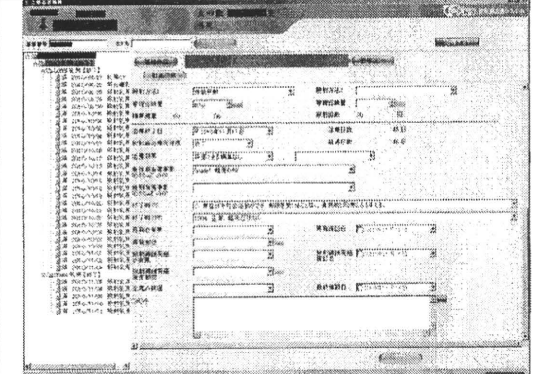
目的

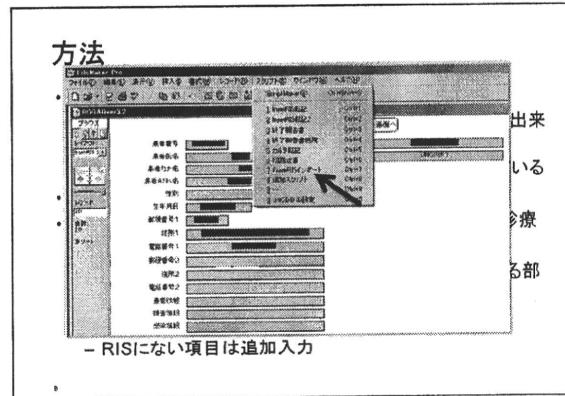
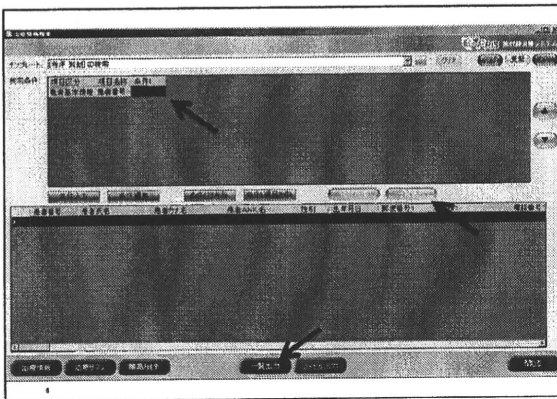
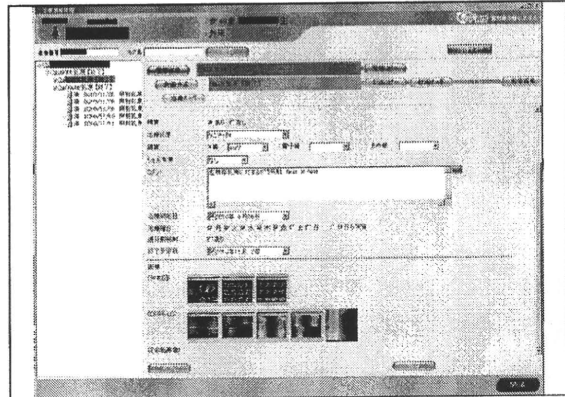
- ROGAD baseの診療科DBとの連携
 - Filemakerで作成され、自由度が高い
 - 一定の条件でカスタマイズ可能
 - DB構造が比較的簡単
 - 連携しやすい
 - JNCDBデータ登録？



方法

- RISでデータ登録
 - 必須項目を入れないと、治療計画用CTのオーダーも出来ない
 - 入力項目はJASTRO構造調査を意識して作成されている
- ID検索をして該当データをcsvファイルで書き出し
- ファイルメーカーのインポート機能を利用して、データを診療科DBに取込
 - ROGAD baseのDBの項目と、RISの項目とで、異なる部分あり
 - 変換するためのスクリプトを作成
 - RISにない項目は追加入力



方法

出
来
る
部
分

- RISにない項目は追加入力

