

**Procedures for Using and Maintaining the
Co-Investigator Page**

The Health and Retirement Study

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Introduction

The Co-Investigator section of the Health and Retirement Study web site provides an overview of the men and women upon whose research work the study depends. From a technical standpoint, this portion of the site is extremely interesting since

- The main page presents a unique user interface
- The content referenced by the main page is automatically generated from the MySQL database that underlies the HRS site
- The content of the MySQL tables is maintained using an Access database via an ODBC link.

This document begins by explaining the programming that underlies the co-investigator page. It then describes how that page links to the PHP programs that generate content that is specific to individual co-investigators. Finally it explains the methods used to update that content, and when necessary, add/change files referenced by that content.

The Co-Investigator Page

This is the only page on the HRS site that uses javascript to perform a “rollover” function. When the page is initially rendered, a small monochrome image of each co-investigator is displayed. When the user moves the mouse over the image, it turns into a colored image. See the Appendix for the Javascript code that actually does the job. In the body of the page, the rollover script is implemented as follows:

```
<tr>
  <!-- First co-investigator -->
  <td width="72" align="center">
    <a href="http://hrsonline.isr.umich.edu/index.php?p=copis&copiid=4"
      onMouseOut="MM_swapImgRestore()" onmouseover="MM_swapImage('brown','',
        './images/imageweb/brown.jpg',1)">
      
    </a>
  </td>
  <td>      <!-- other coinvestigators follow -->      </td>
```

The **onMouseOut** event (the default) produces the monochrome image



The **onMouseOver** event (cursor placed on image) produces a color image



Front page images, color and monochrome, are stored here:


[//linux-src/www/vhosts/hrsonline.isr.umich.edu/html/images/imageweb](http://linux-src/www/vhosts/hrsonline.isr.umich.edu/html/images/imageweb)

Clicking on the image produces a detail page that highlights the educational background and research interests of the co-investigator, both of which are maintained using the **copis** table in the MySQL database. (See below for information on how co-investigator tables in this database are maintained.) The URL for the page

<http://hrsonline.isr.umich.edu/index.php?p=copis&copiid=4>

passes this co-investigator's identifier (in red) to a PHP program, `get_copis3a.php`, that retrieves the data elements necessary to produce the Web page.

Charles C. Brown



[../html/images/imagec/cbrown.jpg](http://linux-src/www/vhosts/hrsonline.isr.umich.edu/html/images/imagec/cbrown.jpg)

Co-Investigator
Health and Retirement Study

Survey Research Center
P.O. Box 1248
Ann Arbor, MI 48106-1248
Phone: 734.763.6867 Fax: 734.647.1186

Email: charlieb@umich.edu
Web site: <http://hrsonline.isr.umich.edu>

Curriculum Vitae [../html/sitedocs/vitae/cbrown.pdf](http://linux-src/www/vhosts/hrsonline.isr.umich.edu/html/sitedocs/vitae/cbrown.pdf)

Education
Ph.D., Harvard University, Cambridge, MA
A.B., M.A., Boston College, Boston, MA

Educational Background

Research and Projects

Dr. Brown is an empirically-oriented labor economist. His past research has focused on topics such as compensating differentials, effects of minimum wage laws and of EEO policies, the determinants of enlistment and re-enlistment in the military, the relationship between employer size and labor market outcomes, and measurement error in survey data. Current work focuses on early-retirement "windows", and consequences of the relatively equal opportunity in the military for children of black soldiers.

Research Interests

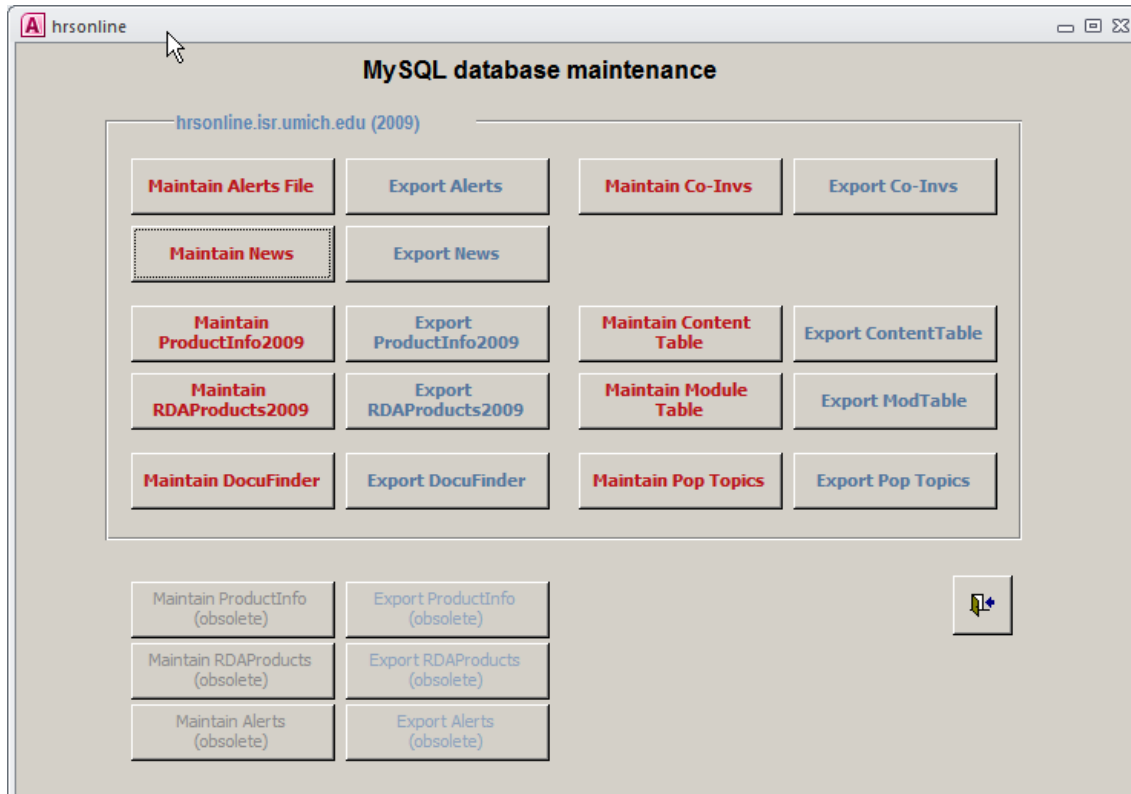
This page also contains information on co-investigator publications. Publication information is maintained using the **copipubs** table in the MySQL database. More details on this below.

Selected Recent Publications
Brown, C and Medoff, J. <i>Firm Age and Wages</i> . Journal of Labor Economics, [2003]
Bound, J, Brown, C and Mathiowetz, N. <i>Measurement Error in Survey Data</i> . Handbook of Econometrics, 2001, Vol. 5, Eds. James Heckman and Edward Leamer. [2001]
Brown, C. <i>Early Retirement Windows</i> . Forecasting Retirement Needs and Retirement Wealth, Olivia S. Mitchell, Brett Hammond and Anna Rappaport, eds., University of Pennsylvania Press [2000]
Brown, C. <i>Minimum Wages, Employment, and the Distribution of Income</i> . Handbook of Labor Economics, Orley Ashenfelter and David Card, eds., 1999, Vol. 3 Elsevier [1999]
Brown, C and Corcoran, M. <i>Sex-Based Differences in School Content and the Male/Female Wage Gap</i> . Journal of Labor Economics, 15(3), July 1997 Part 1, pp. 431-465 [1997]
Brown, C and Medoff, J. <i>The Employer Size Wage Effect</i> . Journal of Political Economy, 97(5), October 1989, pp. 1027-1059 [1989]

Publication Information

Maintaining Co-Investigator Information

1. Use the Access database, V:\WebWork\content.mdb, that serves as a front end to the MySQL database.
2. Click the “Maintain Co-Invs” button to open the co-investigator information update form.



3. Add and/or update Co-investigator background information and publications.

HRS Co-Investigator Information

idnum: 4 Name: Charles C. Brown Title: Co-Investigator
Health and Retirement Study

Address: Survey Research Center
P.O. Box 1248
Ann Arbor, MI 48106-1248
Phone: 734.763.6867 Fax: 734.647.1186

E-mail: charlieb@umich.edu Photo file name: cbrown.jpg

Web site: http://hrsonline.isr.umich.edu C.V. file name: cbrown.pdf

Education: Ph.D., Harvard University, Cambridge, MA
A.B., M.A., Boston College, Boston, MA

Research Interests: Dr. Brown is an empirically-oriented labor economist. His past research has focused on topics such as compensating differentials, effects of minimum wage laws and of EEO policies, the determinants of enlistment and re-enlistment in the military, the relationship between employer size and labor market outcomes, and measurement error in survey data. Current work focuses

seq	idni	author	title	other	year	keep
15	4	Brown, C and Medoff, J	Firm Age and Wages	Journal of Labor Economics,	2003	1
17	4	Bound, J, Brown, C and Mathiowetz,	Measurement Error in Survey Data	Handbook of Econometrics, 2001, Vol. 5	2001	1
18	4	Brown, C	Early Retirement Windows	Forecasting Retirement Needs and Retire	2000	1
19	4	Brown, C	Minimum Wages, Employment, and the Di	Handbook of Labor Economics, Orley As	1999	1
20	4	Brown, C and Corcoran, M	Sex-Based Differences in School Center	Journal of Labor Economics, 15(3), July	1997	1
21	4	Brown, C and Medoff, J	The Employer Size Wage Effect	Journal of Political Economy, 97(5), Octo	1989	1
*	(New) 4					0

4. Exporting to MySQL: Click on “Export Co-Invs”

File Locations

Folder/File	Location
Location of HRS Web site on linux server	//linux-src/www/vhosts/hrsonline.isr.umich.edu
Main co-investigator page	../html/modules/intro/copis.inc.php
PHP file that displays the background pages	../html/modules/intro/get_copis3a.php
Front page small images	../html/images/imageweb/...
Large images for background pages	../html/images/imagec/...
PDF files with Vita information	../html/sitedocs/vitae/...
Content database (Access front end to MySQL)	V:\WebWork\content.mdb
MySQL Database	DATABASE=hrspublic SERVER=linux-src.isr.umich.edu

APPENDIX A: Rollover Javascript

```
<script language="JavaScript">
<!--
function MM_swapImgRestore() { //v3.0
    var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
    x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
    var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length;
i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v3.0
    var p,i,x;  if(!d) d=document;
if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
    if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++)
x=d.forms[i][n];
    for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document); return x;
}

function MM_swapImage() { //v3.0
    var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
for(i=0;i<(a.length-2);i+=3)
    if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc)
x.oSrc=x.src; x.src=a[i+2];}
}
//-->
</script>
```

APPENDIX B: PHP Information Retrieval Script

This portion of the script opens the `copis` table and retrieves the current co-investigator record.

```
<?php # Script 2.6 - get_copis3a.php

/*
 * This page is included by index.php.
 */

// Redirect if this page was accessed directly:
if (!defined('BASE_URL')) {

    // Need the BASE_URL, defined in the config file:
    require_once ('http://hrsonline.isr.umich.edu/includes/config.inc.php');

    // Redirect to the index page:
    $url = BASE_URL . 'index.php?p=copis3a';

    header ("Location: $url");
    exit;

// End of defined() IF.
}

/* get parameter(s) */
if (isset($_GET['copiid'])) {
    $copiid = $_GET['copiid'];
} else {
    $copiid = "notfound";
}

// Check $copiid validity
if (($copiid < 1 || $copiid > 21 ) || $copiid == "notfound") die ("

#### 


```

```

mysql_select_db($db,$link)
    or die("<h4>Error 404: Page Not Found</h4>");

$sql = 'SELECT * FROM copis WHERE idnum=' . $copiid;

$rs = mysql_query($sql);
if (!$rs) die ("<h4>Error 404: page not found</h4>");

/* initialize */
$name      = "";
$title     = "";
$adrs     = "";
$email    = "";
$website  = "";
$imagenam = "";
$imgtemp  = "";
$vitaloc  = "";
$education = "";
$research = "";

$rec = mysql_fetch_array($rs);
if ($rec) {
    $name      = $rec["name"];
    $title     = $rec["title"];
    $adrs     = $rec["address"];

    $email    = $rec["email"];
    $email    = "<br /><b>Email:</b> <a href=\"mailto:" . $email . "\">\" .
$email . "</a>";

    $website  = $rec["website"];
    $website  = "<b>Web site:</b> <a href=\"\" . $website . "\">\" . $website
. "</a>";

    $imagenam = $rec["photo"];
    $imgtemp  = '<img src = "./images/imagec/' . $imagenam . '" alt="CoPI
Picture">';

    $vitaloc  = $rec["vitaloc"];
    if ($vitaloc == "NA") {
        $vitaloc = "";
    } else {
        $vitaloc = "./sitedocs/vitae/" . $vitaloc;
        $vitaloc = "<a href=\"\" . $vitaloc . "\">\" . "<b>Curriculum
Vitae</b></a>";
    }

    $education = "<br /><b>Education</b><br />" . $rec["education"] ;
    $research  = $rec["research"];
}

?>

```

This portion of the script opens the `copipubs` table and retrieves publications for the current co-investigator.

```
<?php
    $sql = "SELECT * FROM copipubs WHERE idnum=" . $copiid . " order by
year desc, seqnum";
    $rs = mysql_query($sql);
    while($rec = mysql_fetch_array($rs)) {
        if ($rec["author"] === "tbd") {
            $pubout = 'Please visit the <a
href="http://hrsonline.isr.umich.edu/index.php?p=biblio">HRS Online
Bibliography</a> for further information.<br /><br />';
            echo $pubout;
        } else {
            $pubout = $rec["author"]
                . ". <em>" . $rec["title"] . "</em>. "
                . $rec["other"] . " ["
                . $rec["year"]
                . "]" <br /><br />";
            echo $pubout;}
    }
?>
```