Application for

Re-Accreditation of Training Program in Interventional Nephrology
(Hemodialysis Vascular Access)
American Society of Diagnostic and Interventional Nephrology

Application for Re-Accreditation of Training Program in Interventional Nephrology

- This application packet is composed of several parts:
  - Requirements for Re-Accreditation
  - Additional Information
  - Application for Re-Accreditation form

- Checklist: **Please provide electronic PDF format of all components (in the order listed below) and email to: info@asdin.org.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application (all questions must be answered)</td>
<td>checked</td>
</tr>
<tr>
<td>Documentation that Program Director is a current ASDIN member</td>
<td>checked</td>
</tr>
<tr>
<td>Documentation of Program Director’s current HVA Certification</td>
<td>checked</td>
</tr>
<tr>
<td>Curriculum vitae (only for new program director and faculty members added since previous accreditation)</td>
<td>checked</td>
</tr>
</tbody>
</table>

**Written descriptions of:**

- Funding of program (updated description required)
- Training Program design and organization (updated description required)
- Quality assurance (updated description required)
- Facilities (updated description only required if changes from previous application)
- Record keeping (updated description only required if changes from previous application)

**Application Fee**

At the time of electronic submission of the application, a fee of $500 should be made payable and mailed to:

ASDIN  
134 Fairmont Street, Suite B  
Clinton, MS 39056
Re-Accreditation of Training Program in Interventional Nephrology

Training Programs will be responsible for training new nephrology fellows in Interventional Nephrology and can provide training resources for nephrologists who are already in practice. Therefore, it is essential that these programs meet specific requirements to assure that their graduates will be able to fulfill the training requirements outlined herein.

Training Programs are accredited for 5 years.

A Re-Accreditation application should be submitted at least 6 months prior to the accreditation expiration date. A 3-month grace period following the Accreditation expiration will be in effect if the Re-Accreditation application has been submitted by the expiration date but processing by ASDIN has not been completed. This grace period may be extended at the discretion of the ASDIN Certification and Accreditation Committee if scheduling or other special circumstances are deemed to exist.

If a training program’s Accreditation has been expired for more than 6 months without application for Re-Accreditation, a new Accreditation application and corresponding fee will be required to reinstate Accreditation.

Re-Accreditation will be granted for five (5) years and begins on the original Accreditation anniversary date no matter when the Re-Accreditation application is submitted and approved by ASDIN.

Note: The Accreditation for the Training Program is tied to the sponsoring center, not with the program director.

Further documentation is required prior to the term expiration for the following reasons:

- Change in program facility location – additional fee ($100) and site visit required.
- Change in program director – additional fee ($100) and committee review required
- Change in facility ownership – additional fee ($100) and committee review required

If the Training Program has any of these changes prior to the expiration of the 5-year accreditation term, please review the appropriate section for specific requirements.
Application Description & Requirements
(The application should be organized according to the following outline.
Be sure to address each requirement individually and specifically, if required.
Initiate a new page for each individual requirement.)

1. Funding Requirement:
The Training Program must show evidence that a source of funding sufficient to support the program existence.

To meet this requirement:
A letter from the Director of the Training Program is sufficient for the fulfillment of this requirement. Basically, the concern relates to the support of training and not to the support of the treatment facility although the two are closely related. It is recognized that for a Training Program to function adequately it requires financial support. The physician providing the training must have time allotted for training. Training utilizes supplies over and above that which is required in the usual ordinary operation of the facility thus creating a training expense. Since a trainee functions less efficiently than a fully trained operator, the hours of the facility required for the completion of scheduled cases may have to be extended thus creating an additional expense. All of these expenses must have an identified source of funding.

2. Faculty Requirement:
A faculty that is committed to the program continues as a requirement. Minimal basic requirements shall be:

- The Program Director is a current ASDIN member.
- The Program Director must be currently certified in Hemodialysis Vascular Access Procedures by the American Society of Diagnostic and Interventional Nephrology.
- At least one full time faculty equivalent is committed to the interventional facility.

To meet requirements:
The individuals that are committed to the Training Program must be formally identified.

Current Faculty
If the faculty identified in the previous accreditation application is current, no additional curriculum vitae (CV) is required. List all current faculty on the Re-Accreditation application form and check the box that indicates that the current faculty remains from the previous application.

Addition of New Faculty
If new faculty has been added to the Training Program since the previous accreditation date, a CV must be submitted with the application in order to verify that they are qualified. Please check the box that indicates new faculty on the Re-Accreditation application form and list all faculty where indicated.
Change in Program Director
If the program director identified in the previous application is leaving or has left the Training Program, the following documentation is required:

1) Program Director chronology including departure dates, effective date of hire for all Program Directors during the previous accredited period.
2) CV of current Program Director
3) Current Program Director’s ASDIN Membership status (current membership required)
4) Current Program Director’s ASDIN Certification status (current HVA certification required)

3. Training Program Design and Organization:
The Training Program must be formalized and organized. There should be a body of didactic material that is presented and a defined body of clinical work that is required of all trainees. There must be an organized formal mechanism for proctoring of trainees and a mechanism of evaluation to determine clinical competence.

Didactic instruction -
Didactic material must be presented to a trainee that is either written, based upon lectures or both. This must be organized and formal. The material presented should be appropriate for the procedures that are being taught but in general should include the following:

Basics of Dialysis Vascular Access
   An Overview of Dialysis Vascular Access
   Basic Anatomy for Dialysis Vascular Access
   Physical Examination of Dialysis Vascular Access

Basics of the Interventional Laboratory
   Basic Tools and Procedures
   Imaging and Radiation Safety
   Sedation – Analgesia

Basic Interventional Procedures in Grafts and Fistulas
   Angioplasty of Venous Stenosis
   Endovascular Thrombectomy
   Tunneled Dialysis Catheters

Documentation and Coding of Interventional Procedures

Proctored training -
The trainee should be adequately supervised and proctored until they have gained sufficient clinical competence to make independent judgment and operate independently. The duration of the proctored period will vary with the individual trainee but should be based upon formalized evaluation of progress.
The following case numbers should be used as a general guideline:

**AV Grafts**
- Angiography – 25 cases
- Angioplasty – 25 cases
- Thrombolysis/thrombectomy – 25 cases

**AV Fistulae**
- Angiography – 10 cases
- Angioplasty – 10 cases
- Thrombolysis/thrombectomy – 5 cases

**Tunneled hemodialysis catheters**
- Placement of 10 tunneled catheters

**Endovascular stents**
- Placement of 5 endovascular stents

**Accessory vein (fistula side branch) obliteration**
- Performance of 5 surgical procedures

**Subcutaneous ports**
- Placement of 5 ports

**Evaluation** –
This must be an ongoing process during training and should continue until the trainee’s evaluation indicates a satisfactory level of clinical competence. The trainee must be able to work unsupervised and be able to solve problems independently.

**To meet this requirement:**

**Didactic instruction** – At a minimum a detailed outline of the didactic material that is presented should be submitted. If a written training manual is used, submit a copy for evaluation.

**Proctored training** – A detailed explanation of the approach used in proctoring the trainee should be submitted. The number of cases of each category that are required during the training period should be explained. The explanation provided should also specify who does the proctoring and how it is accomplished.

**Evaluation** - Provide evidence of a formalized record of evaluation which includes case numbers, outcomes and complications. If a written examination is utilized, submit a copy of the examination.
4. Facility Requirements
In order for a Training Program in Interventional Nephrology to be successful, it must be associated with a full time interventional facility that is specifically designed, equipped, supplied and staffed to manage the problems associated with hemodialysis vascular access.

Interventional Nephrology training requires the availability of an appropriate facility, one capable of managing cases in an effective, efficient and safe manner. These attributes must be apparent in the space, equipment, supplies and staff that are dedicated to the facility that will be utilized in the training process.

This shall require the following as a minimum:

**Space**
An adequate and appropriate space must be allotted for each of the following functions.

**Patient waiting area** – This area must be conveniently located to the treatment area. It must have seating appropriate for the size of the treatment facility and the case load of the facility. It must be well lighted and ventilated. It must be easily accessible by patients that are mobility impaired. It must be located so as to be easily monitored by personnel associated with the facility.

**Patient dressing area** – A patient dressing area must be available that provides adequate privacy for patients who are dressing. It must be conveniently located to the treatment area. It must be well lighted and ventilated. It must be easily accessible by patients that are mobility impaired. It must be located so as to be easily monitored by personnel associated with the facility.

**Patient recovery area** – This area must be conveniently located to the treatment area. It must be well lighted and ventilated. It must provide space for patient recovery appropriate to the size of the treatment facility. In general, no less than two recovery beds per treatment room. Patient monitoring equipment must be located within the recovery area. Emergency equipment must be readily available. The area must be easily assessable to stretcher traffic.

**Procedure room** – The procedure room must be of adequate size to accommodate the safe and efficient conduct of the procedures that are being performed within the facility. It must have adequate storage space to facilitate the efficient conduct of an individual case. Patient monitoring equipment must be available within the room and emergency equipment must be immediately available to the room. The room must have a source of medical grade oxygen. The room must meet local, state and federal radiation standards. The ceiling, walls and floor of the room must be constructed of materials that will allow adequate cleaning to provide an operating room environment. The lighting of the room must be adequate for the procedures that are performed. The room must be ventilated appropriate for the procedures performed and to allow for the comfort of the personnel and patients.
Supply storage – The facility must have space allocated for the safe storage of supplies. This room must be located so as to allow for quick retrieval of needed supply items during the conduct of a case. The room must have facilities that allow for the safe and appropriate storage of supply items. The space allocated must be adequate to allow for the storage of par levels of supplies maintained by the facility.

Equipment
Proper equipment for the safe, effective and efficient accomplishment of the procedures performed is essential. The following minimum is required:

Fluoroscopy equipped for vascular procedures – The procedure room must be equipped with a fluoroscopy machine that is adequate for the procedures that are performed. It must meet all local, state and federal requirements and regulations.

Equipment for making permanent records of images for documentation – The facility must have some means for making permanent records of imaging for documentation purposes. This may be done with either a hard copy image or with digital imaging.

Ultrasound equipment to use for catheter placements – The facility must have some type of ultrasound equipment that is adequate for the imaging requirements of tunneled catheter placement.

Adequate fluoroscopy procedure table – The procedure room must be equipped with a table that is adequate for use with fluoroscopy. It must of such construction as to be safe for patient use.

Adequate lighting – The lighting available within the procedure room must be adequate for the procedures that are performed.

Patient monitoring equipment – Patient monitoring equipment must be located within the procedure room to provide monitoring of blood pressure, EKG and pulse oxymetry.

Supplies
Proper supplies for the full range of interventional procedures performed within the facility must be available. Par levels for supplies must be established. Mechanisms for the reordering of supplies must be established. Adequate storage for supplies must be provided.

The facility should have established supply list with par levels determined. The range of supplies available should be appropriate for the types of procedures that are performed with the facility. The facility should be able to demonstrate that there is an adequate mechanism in place for re-ordering of supplies to maintain par levels. Supplies must be
stored in an appropriate manner so as to avoid damage, loss of sterility and maintenance of proper security.

**Staff**
In order to perform interventional procedures, adequate trained, dedicated staff must be provided. Staff adequate to safely, effectively and efficiently perform the procedures must be available. The following minimum is required:

**Nursing staff** – Nursing staff adequate for monitoring of patients during a procedure and during recovery. Depending upon the level of activity within the facility, this function might be provided by a single nurse. At least one nurse within the facility should be ACLS certified.

**Scrub technician** – A scrub technician should be available during the procedure to assist the operator who is performing the procedure. While this individual might be a radiology technician or a nurse, such certification is not required.

**Radiology technician** – A certified radiology technician or an equivalent individual, if not required by state regulation should be available during all procedures to manage the fluoroscopy equipment.

**To meet this requirement:**
Review carefully the information that was provided in program’s previous accreditation application. Address each area and indicate whether or not any changes have been made. If changes have been made, please describe them in detail.

**Note:** If the facility location has changed, a $100 fee and a site visit are required.

5. **Volume of Procedures Requirement**
In order for a Training Program to be successful, it should be based in a facility that is actively performing interventional procedures on an ongoing basis. The following minimum annual requirements shall be required:

- Angiography – 300 cases/year
- Angioplasty – 300 cases/year
- Thrombolysis/thrombectomy – 75 cases/year
- Tunneled long-term catheter placements – 75 cases/year

*Note: a combined procedure will provide a case in more than one category.*

**To meet this requirement:**
On the re-accreditation application form, provide a listing of the number of procedures that you performed in each of the basic categories last calendar year along with an estimate of your expectations for the current calendar year.
6. Record Keeping Requirement
Reports of the procedures performed must be generated and placed in the patient’s permanent medical record. Documentation of all procedures is a necessity. Each trainee should receive documentation of the types of procedures performed, the numbers of each type of procedure performed and the outcome of the procedure. Maintaining a computerized database is strongly recommended.

The training facility must have a means of maintaining permanent medical records. These can be either paper based or electronic. If the permanent medical records are electronic, an adequate mechanism for record back-up must be in place.

To meet this requirement:
In the Training Program’s previous accreditation application a detailed description was provided of the mechanism utilized within your facility for generating and maintaining records of procedures that are performed as well as detail of the mechanism that you use for tracking each trainee’s procedure numbers and outcomes. Review the information carefully that you provided. If changes have been made to the record keeping process, please describe in detail.

7. Quality Assurance Requirement:
An ongoing quality assurance program is an essential part of any interventional facility. The purpose of this program should be to provide for a systematic method to continuously assess and improve all aspects of health care delivery. It should be designed to improve patient care outcomes through the ongoing objective assessment of important aspects of patient care based on quality, cost and service and the appropriate solutions of identified problems. Medical necessity, appropriateness of care and adverse outcomes should be monitored. Practice guidelines should be developed and monitored. Outcome data should be collected and analyzed on an ongoing basis.

There should be a written record of the quality assurance program along with a record relating to outcomes and complications for the facility as a whole and for individual physicians that operate within the facility. There should also be documentation as to how this program is used to affect changes in patient care, improve service or decrease cost.

To meet this requirement:
Provide a detailed description of your quality assurance program. Explain how it relates to individual physician operators as well as the facility as a whole. Describe how this program is utilized to affect changes in patient care, improve service or decrease cost within the facility.

8. Site Visit Requirement:
Re-Accreditation may require a site visit. The final determination of a site visit will be made by the ASDIN Certification and Accreditation Committee. Any associated costs of a site visit are the responsibility of the applicant.
Accreditation Interval
In order for the Training Program to maintain its status with the American Society of Diagnostic and Interventional Nephrology, it must be accredited every 5 years. During this period, the Training Program must abide by all requirements as outlined. ASDIN reserve the right to suspend Accreditation of a Training Program that does not meet these requirements.

Each Accredited Program is required to notify ASDIN in the event of any of the following material changes:

1. Change in Program Director

   The Training Program must:
   A) Notify ASDIN in writing within 30 days of the date when it has received notification that the program director is leaving.
   B) Notify ASDIN in writing of the confirmed date of departure of the program director.
   C) Within 30 days of the hiring of a new program director, Submit to ASDIN the name of the new program director, the effective date of hire, and the director’s CV. The new program director must meet all ASDIN accreditation requirements.

   Accreditation will be temporarily suspended effective on the date of departure of the program director on record.

   The Training Program will be reinstated upon review and approval of new Program Director documentation by the ASDIN Certification and Accreditation Committee.

   No application form is required for change in Program Director, only $100 administrative fee and notification/documentation specified above..

2. Change in physical location

   Training program must notify ASDIN in writing 60 days prior to a change in physical location. Program shall submit information on the new address and new facility description which outlines compliance with requirements listed in Item 4. Facility Requirements above.
Change in physical location will require a $100 administrative fee and site visit. Any associated costs of a site visit are the responsibility of the applicant.

3. Change in ownership

Training program must notify ASDIN in writing 60 days prior to a change in ownership. Program shall submit information on funding which outlines continued compliance with funding requirements as outlined in Item 1. Funding above.

No application form is required for change in ownership only $100 administrative fee and notification/documentation specified above.

Fees
Re-Accreditation Fee: A fee of $500 should be made payable and mailed to:
American Society of Diagnostic and Interventional Nephrology
134 Fairmont Street, Suite B
Clinton, MS 39056
This fee is non-refundable and covers the expense of processing the re-accreditation application.

Site Visits: Any travel costs incurred for the site visit will be reimbursed by the applicant.

Submission ****No paper or faxed copies are accepted.****
Email an electronic PDF copy of the application form and all required supporting documentation to: info@asdin.org.

Questions
If you have questions regarding the re-accreditation process, please contact:
Phone: 601-924-2220
Email: info@asdin.org
American Society of Diagnostic and Interventional Nephrology
Application for Training Program Re-Accreditation

Interventional Nephrology Training Program

Name of Training Program
University of Alabama at Birmingham

Institution
Roman A. Shingarev, M.D.

Program Director

Program Director has changed from previous accreditation application – See Faculty section of Requirements for Re-Accreditation.

1530 3rd Ave. S.   Birmingham,   Alabama   35294-0007
Address   City   State,   Zip Code

Description of Program
A detailed description of the Training Program must accompany the application. This should include a description of the didactic training as well as the clinical training.

Type of Program
☒ Academic  ☐ Private Practice  ☐ Industry

Number of physicians trained ___________ 8 ________(during current accredited period)

Annual capacity of Training Program ___________ 1 ________(current number of physician trainees)

Source of Funding
(Application must be accompanied by a letter from institution assuring continued funding of program)
University of Alabama Nephrology Division

Faculty: (List all faculty below and check the box that is appropriate; submit CVs for new faculty)

☒ Faculty listed below are same as previous accreditation application; No further documentation required.
☒ Faculty listed below includes new faculty since previous application; Submit CVs for new faculty

Roman A. Shingarev, M.D.
Name

Ahmed Kamel Abdel Aal, M.D.
Name

Name

Name
Facility: Facility meets requirements of ASDIN:

As it relates to space:
- Yes, there has been no change since previous accreditation
- Yes, but changes have been made since previous accreditation (changes must be described in attachment)
- No (If no, rationale for discrepancy must accompany application)

As it relates to equipment:
- Yes, there has been no change since previous accreditation
- Yes, but changes have been made since previous accreditation (changes must be described in attachment)
- No (If no, rationale for discrepancy must accompany application)

As it relates to supplies:
- Yes, there has been no change since previous accreditation
- Yes, but changes have been made since previous accreditation (changes must be described in attachment)
- No (If no, rationale for discrepancy must accompany application)

As it relates to staff:
- Yes, there has been no change since previous accreditation
- Yes, but changes have been made since previous accreditation (changes must be described in attachment)
- No (If no, rationale for discrepancy must accompany application)

Volume of Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th># Last calendar year</th>
<th>Expected # current calendar</th>
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</thead>
<tbody>
<tr>
<td>Angiography</td>
<td>521</td>
<td>600</td>
</tr>
<tr>
<td>Angioplasty</td>
<td>434</td>
<td>450</td>
</tr>
<tr>
<td>Thrombectomy</td>
<td>221</td>
<td>200</td>
</tr>
<tr>
<td>Tunneled catheter placements</td>
<td>247</td>
<td>300</td>
</tr>
</tbody>
</table>

Record Keeping

The record keeping system is in compliance with that required by ASDIN.
- Yes, there has been no change since previous accreditation
- Yes, but changes have been made since previous accreditation (changes must be described in attachment)
- No (If no, rationale for discrepancy must accompany application)
The record keeping system is computerized.

☑ Yes
☐ No

Quality Assurance Program (A detailed description must accompany application)

The quality assurance program is in compliance with that required by ASDIN.

☑ Yes, there has been no change since previous accreditation
☐ Yes, but changes have been made since previous accreditation (changes must be described in attachment)
☐ No (If no, rationale for discrepancy must accompany application)

Signature

I certify that the information contained herein is correct and complete to the best of my knowledge.

[Signature]

Signature of Program Director Date

03/25/2014

205.996.2186  205.9966465  roman@uab.edu

Telephone Number Facsimile Number E-mail Address
January 15, 2013

Roman A Shingarev, MD  
1037 Lakeview Crescent  
Birmingham, AL 35205

Dear Dr. Shingarev:

On behalf of the American Society of Diagnostic and Interventional Nephrology, I am pleased to advise that your application for certification in Hemodialysis Vascular Access Procedure has been approved including Endovascular Stent Placement.

The five-year certification period is from January 8, 2013 to January 7, 2018. Enclosed is your certificate suitable for framing.

Congratulations!

Sincerely,

Bertinna Dubra  
ASDIN Coordinator

Enclosure: Certificate#V-296
The American Society Of
Diagnostic and Interventional Nephrology

Be it known by those present that

Roman A. Shingarev, MD

has completed all of the requirements and has demonstrated the prescribed level of training and experience in the practice of Interventional Nephrology as applied to

Hemodialysis Vascular Access Procedures

to the Council of the American Society of Diagnostic and Interventional Nephrology

Therefore on this 8th day of January 2013 the Society grants this

Certificate of qualification in

Interventional Nephrology

Number V-296
Exp: 1/7/2018

President
Chairman, Certification Committee
Roman A. Shingarev

Last updated: 12/30/2013

Roman Alekseyevich Shingarev
Physician (North America)
roman@uab.edu

University of Alabama at Birmingham, Division of Nephrology
212 2nd ave s
Birmingham
Alabama
35294-0007 United States
[ Map ]

205 996-2186 (Phone)
205 205-996-6465 (Fax)

Credentials: MD
HVA Certification (Not visible to others): Yes
HVA Stent Placement (Not visible to others): Yes
HVA Certification Expiration Date (Not visible to others): 1/7/2018

Partners

Click here for partner details
CURRICULUM VITAE

Date: July 15, 2013

PERSONAL INFORMATION
NAME Roman Shingarev
CITIZENSHIP United States
FOREIGN LANGUAGES Russian
HOME ADDRESS 1037 Lakeview Crescent
Birmingham, AL 35205
TELEPHONE (205) 370-8333

RANK/TITLE Assistant Professor
DEPARTMENT Medicine and Radiology
BUSINESS ADDRESS ZRB 624
1530 3rd Ave S
Birmingham, AL 35294
PHONE (205) 996-2306
FAX (205) 996-6465

HOSPITAL AND OTHER APPOINTMENTS
Assistant Professor
Division of Nephrology, Department of Medicine
Division of Interventional Radiology, Department of Radiology

PROFESSIONAL CONSULTANTSHIPS None

EDUCATION
July 2005 M.D., University of Alabama School of Medicine, Birmingham, AL
July 2001 B.S., Psychology, Cum Laude, Birmingham-Southern College, Birmingham, AL

MILITARY SERVICE None

MEDICAL LICENSURE
State of Alabama License # 27857, since January 2007
State of Alabama Controlled Substance License, since January 2007
Federal DEA Certificate, since January 2007

BOARD CERTIFICATION
American Board of Internal Medicine, Internal Medicine, August 2008-August 2018
American Board of Internal Medicine, Nephrology, November 2010-November 2020
American Society of Diagnostic and Interventional Nephrology, January 2013

POSTDOCTORAL TRAINING

July 2011 Interventional Nephrology Fellowship, UAB Medical Center, Birmingham, AL
July 2010 Nephrology Fellowship, UAB Medical Center, Birmingham, AL
July 2008 General Internal Medicine Residency Program, UAB Medical Center, Birmingham, AL

ACADEMIC APPOINTMENTS

September 2011 – current Assistant Professor, Department of Medicine and Radiology, UAB Medical Center, Birmingham, AL
September 2011 – current Director, Interventional Nephrology Fellowship Program, UAB Medical Center, Birmingham, AL

HONORS AND AWARDS

02/2011 3rd place winner at Regional SSCI Nephrology Young Investigators’ Forum
04/2010 Official poster selection for presentation to residents and medical students at NKF Clinical Meeting, Orlando, Florida
09/2009 2nd place winner at Regional NKFG Meeting Poster Presentation Session
02/2009 2nd place winner at Regional SSCI Nephrology Young Investigators’ Forum
06/2001 Best International Student Award, Birmingham-Southern College
06/2000 President’s List, Birmingham-Southern College
1998-2000 Dean’s List, Birmingham-Southern College

TRAVEL AWARDS

04/2011 NKF 6th Annual Nephrology Young Investigator National Forum, Las Vegas, Nevada
10/2009 ASN/Boehringer Ingelheim Travel Support for Nephrology Fellows, San Diego, California
09/2009 NKFG Nephrology and Transplantation Update Meeting, Hilton Head, South Carolina
03/2009 NKF 4th Annual Nephrology Young Investigator National Forum, Nashville, Tennessee
02/2009 NKF Regional Young Investigator Forum, New Orleans, Louisiana

PROFESSIONAL SOCIETIES/MEMBERSHIPS

2006-current American College of Physicians, Associate Member
2008-current American Society of Nephrology, Member
2008-current National Kidney Foundation, Member

COUNCILS AND COMMITTEES

UNIVERSITY ACTIVITIES

EDITORIAL BOARD MEMBERSHIPS

None
MAJOR RESEARCH INTERESTS
My primary research focus is on improvement of hemodialysis access quality, arteriovenous fistula survival and reduction of dialysis catheter use. I am also interested in outcomes of patients treated with Continuous Renal Replacement Therapy.

TEACHING EXPERIENCE
2010-current Instructor, Renal Physiology Module, University of Alabama School of Medicine.
2010-current Preceptor, Introduction to Clinical Medicine, University of Alabama School of Medicine.
2011-current Attending, Nephrology consultation service, UAB Medical Center.

MAJOR LECTURES/VISITING PROFESSORSHIPS
None

GRANT SUPPORT

BIBLIOGRAPHY
MANUSCRIPTS

BOOKS/ABSTRACTS

POSTER PRESENTATIONS

09/2009 “Comparison of RIFLE and AKIN Classifications Applied to ICU Patients in Need of Renal Replacement Therapy”. Poster presentation at NKFG Nephrology and Transplantation Update Meeting, Hilton Head, South Carolina

03/2010 “Role of Urine Output Criterion in RIFLE and AKIN Classification Systems Applied to ICU Patients in Need of Renal Replacement Therapy”. Poster presentation at 23rd Annual UAB Trainee Research Symposium, Birmingham, Alabama

04/2010 “Role of Urine Output Criterion in RIFLE and AKIN Classification Systems Applied to ICU Patients in Need of Renal Replacement Therapy”. Poster presentation at NKF Clinical Meeting, Orlando, Florida

02/2011 “Should AV Grafts Be Placed in Pre-Dialysis Patients?” Poster presentation at SSCI Regional Young Investigator Forum, New Orleans, Louisiana

10/2011 “Association of dialysis catheter use with ipsilateral vascular access survival.” Poster presentation at NKF Clinical Meeting, Philadelphia, Pennsylvania

04/2013 “Natural history of tunneled dialysis catheters placed for hemodialysis initiation.” Poster presentation at NKF Clinical Meeting, Orlando, Florida

ORAL PRESENTATIONS

02/2009 “Early Initiation of Continuous Venous Hemodiafiltration Improves Recovery of Renal Function”. Oral presentation at SSCI Regional Young Investigator Forum, New Orleans, Louisiana


02/2011 “Should AV Grafts Be Placed in Pre-Dialysis Patients?” Oral presentation at SSCI Regional Young Investigator Forum, New Orleans, Louisiana

04/2011 “Should AV Grafts Be Placed in Pre-Dialysis Patients?” Oral presentation at NKF 5th Annual Nephrology Young Investigator Forum, Las Vegas, Nevada
Digital dictation system has changed from Talk Tech to PowerScribe 360. All fellows still receive dictation training prior to starting the fellowship.
CURRICULUM VITAE
University of Alabama at Birmingham
School of Medicine Faculty

Date: March 2014

PERSONAL INFORMATION:
Name: Ahmed Kamel Abdel Aal, MD, MSc, PhD
Citizenship: Egypt
Foreign Language(s): Arabic
Home Address: 758 Scout Creek Trail
Birmingham, Alabama 35244
Phone: (205) 862-0599, (205) 989-7224

RANK/TITLE:
Assistant Professor, tenure-earning track
Chief, Section of Vascular and Interventional Radiology
Medical Director, Heart and Vascular Center
Medical Director, Vascular Access Service

Department:
Department of Radiology

Business Address:
University of Alabama at Birmingham (UAB)
Department of Radiology
619 19th Street South
New Hillman Building, NHB-H623
Birmingham, AL 35249
Phone: (205) 975-4850
Fax: (205) 975-5257
E-mail: akamel@uabmc.edu

HOSPITAL AND OTHER APPOINTMENTS:
University of Alabama at Birmingham (UAB)
Children’s Hospital of Alabama
Birmingham, Alabama

PROFESSIONAL CONSULTANTSHIPS:
St. Jude Medical
Bard Peripheral Vascular
Baxter Healthcare Corporation

EDUCATION:
Institution
Bachelor of Medicine and Surgery
University of Cairo Medical School
Cairo, Egypt
M.B.,B.Ch
Education commission of foreign medical graduate certification (ECFMG)
United States medical license examination (USMLE)

Degree
University of Cairo
Cairo, Egypt
Masters of Science (M.Sc.)
Diagnostic Radiology

University of Cairo
Cairo, Egypt
Philosophy Doctorate (Ph.D.)
Diagnostic Radiology

Year
10/1989 - 12/1995
2/2002 - 10/2010
**MILITARY SERVICE:** Not Applicable

**LICENSURE:**
- 2004 Medical License, Alabama L-3330SP
- 2006 Medical License, New Hampshire NH-13335

**BOARD CERTIFICATION:**
- 11/2000 Egyptian Board of Radiology, Cairo University, Egypt
- 06/2009 American Board of Radiology
- 11/2011 American Board of Radiology Certificate of Added Qualification (CAQ) in Interventional Radiology

**POSTDOCTORAL TRAINING:**

<table>
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<tr>
<th>Year</th>
<th>Degree</th>
<th>Institution</th>
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<tbody>
<tr>
<td>03/1996 – 02/1997</td>
<td>Intern</td>
<td>University of Cairo Cairo, Egypt</td>
</tr>
<tr>
<td>09/1997 – 09/2000</td>
<td>Resident in Diagnostic Radiology</td>
<td>University of Cairo Cairo, Egypt</td>
</tr>
<tr>
<td>01/2005 – 12/2005</td>
<td>Fellow in Vascular and Interventional Radiology</td>
<td>University of Alabama at Birmingham (UAB)</td>
</tr>
<tr>
<td>01/2006 – 12/2006</td>
<td>Fellow in Neuroradiology</td>
<td>University of Alabama at Birmingham (UAB)</td>
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<tr>
<td>01/2007 – 10/2007</td>
<td>Resident in Radiology</td>
<td>University of Alabama at Birmingham (UAB)</td>
</tr>
<tr>
<td></td>
<td>(American Board of Radiology requirement for foreign medical graduates)</td>
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</table>

**ACADEMIC APPOINTMENTS:**

<table>
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<tr>
<th>Year</th>
<th>Rank/Title</th>
<th>Institution</th>
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<tr>
<td>10/2010 - present</td>
<td>Assistant Professor</td>
<td>Department of Radiology, University of Alabama at Birmingham (UAB)</td>
</tr>
<tr>
<td>10/2009 - 10/2010</td>
<td>Clinical Assistant Professor</td>
<td>Department of Radiology, University of Alabama at Birmingham (UAB)</td>
</tr>
<tr>
<td>10/2007 – 10/2009</td>
<td>Clinical Instructor</td>
<td>Department of Radiology, University of Alabama at Birmingham (UAB)</td>
</tr>
<tr>
<td>03/2002 - 12/2004</td>
<td>Instructor</td>
<td>Department of Radiology, University of Cairo, Cairo, Egypt</td>
</tr>
</tbody>
</table>

**AWARDS/HONORS:**
- 2013 Best Doctors in America Award
- 2012 Best Doctors in America Award


June 2010 Louisville Slugger Award for best board reviewer. This is a single, unique award given to one faculty member yearly.

August 2009 University of Alabama Radiology “Top ten faculty award” for excellence in resident education.

March 2009 University of Alabama Radiology Top Ten Faculty Award for excellence in resident education.

August 2008 University of Alabama Radiology Top Ten Faculty Award for excellence in resident education.

January 2008 University of Alabama Radiology Top Ten Faculty Award for excellence in resident education.


December 1995 Honor Degree recognition for outstanding academic performance in the Bachelor of Medicine and Surgery exam, Cairo University.

PROFESSIONAL SOCIETIES:
National Comprehensive Cancer Network (NCCN)
Eastern Cooperative Oncology Group (ECOG)
Cancer Trials Support Unit (CTSU)
Society of Interventional Radiology (SIR)
Radiological Society of North America (RSNA)
American Roentgen Ray Society (ARRS)
Medical Association of the State of Alabama
Jefferson County Medical Society

MEMBERSHIPS: None other than above

COUNCILS AND COMMITTEES:
August 2012 - present Member of the National Comprehensive Cancer Network (NCCN)
August 2012 - present UAB representative of NCCN “Colon/Rectal/Anal Cancers” Panel
August 2012 - present Investigator for the NCCN oncology research program
August 2012 - present Member of the Eastern Cooperative Oncology Group (ECOG)
August 2012 - present Member of the Cancer Trials Support Unit (CTSU)
UNIVERSITY ACTIVITIES:
University Committees:
October 2010 - present  Gastrointestinal Working Group
March 2011 - present  UAB Carotid Stent Compliance Committee
March 2011 - present  UAB Medical Directors Committee
March 2011 - present  UAB Joint Medical Directors Council
June 2011 - present  Blood Utilization and Management Committee; developed a protocol for standardization of coagulation parameters required for the interventional radiology procedures.

Radiology Committees:
March 2011 - present  Radiology Resident Education Committee
March 2011 - present  Radiology Quality Council
March 2011 - present  Radiology Leadership Committee
July 2011 - present  Co-chair, Heart and Vascular Center Oversight Committee

Service Activities:
See Service Portfolio

Educational Activities:
See Teaching Portfolio

EDITORIAL BOARD MEMBERSHIPS:
Section Editor, Journal of Radiology Case Reports
Editorial Board, World Journal of Otorhinolaryngology
Editorial Board, Research and Reports in Focused Ultrasound
International Advisory Board, Journal of Royal Medical Services
Editorial Board, Edorium Journal of Radiology

MAJOR RESEARCH INTERESTS:
My research interest is basically in interventional oncology, focusing on outcomes of trans-arterial chemo-embolization (TACE) in the treatment of hepatocellular carcinoma and trans-arterial radio-embolization (TARE) in the treatment of liver metastasis. I also have research interest in hemodialysis interventions, peritoneal dialysis catheter placement, and management of pulmonary arteriovenous malformations.

TEACHING EXPERIENCE:
2010 - present  Participate in several teaching opportunities on both informal and formal levels within UAB and through outside teaching hospitals for medical students, residents, fellows and peers

Also see Teaching Portfolio
MAJOR LECTURES AND VISITING PROFESSORSHIPS:
December 2012  “Liver-Directed Therapy,” National Cancer Institute, Cairo, Egypt.

January 2013  “Advancing the Use of Y90”. Alexandria Medical Center, Alexandria, Egypt.

GRANT SUPPORT: (PAST AND CURRENT)

2. Prospective, Multi-Center, Randomized, Concurrently-Controlled Study of the FLUENCY® PLUS Endovascular Stent Graft in the Treatment of In-stent Restenosis in the AV Access Venous Outflow Circuit (RESCUE), Bard Peripheral Vascular, Inc. PI: Ahmed Abdel Aal; 2011. Funding: $126,000, PI effort: 25%.


OTHER:
Peer Review Activities:
Reviewer

- Journal of Vascular and Interventional Radiology
- American journal of Roentegenology
- European Journal of Radiology
- Journal of Endovascular Therapy
- Journal of Royal Medical Services

Occasional Reviewer

- European Radiology™
- Reports in Medical Imaging
- Clinical gastroenterology and hepatology
- Gastroenterology
- Neurosurgery
- Thrombosis and Hemostasis
- Radiology Research and Practice
- Journal of the National Comprehensive Cancer Network
- Journal of X-Ray Science and Technology
- Investigative Radiology
- World Journal of Gastroenterology
- Clinical Medicine Insights: Oncology
- Clinical Kidney Journal
- Clinical interventions in aging
- Clinical and experimental gastroenterology
- European Journal of Gastroenterology and hepatology
- The American journal of Gastroenterology
- Vascular Journal

Book Reviewer

- Lippincott Williams & Wilkins
- Wolters Kluwer Health
Course Organizer:
Director, Panelist, Moderator and Lecturer, Symposium for Academic Interventional Radiology, Ashville, August 2013. This symposium is held annually for the academic IR members and involves 12 institutions, mainly in the southeast region of the United States.

Course Proctor:
Proctor of a course on “IVC placement and retrieval,” Mississippi, June 2013.

Research in progress:
2. A Prospective, Multi-Center Study of the Bard® Denali™ Retrievable Inferior Vena Cava Filter System, Bard Peripheral Vascular, Inc. PI: Ahmed Abdel Aal, MD, MSc, PhD; 2011.
5. ECOG 1208: A Phase III Randomized, Double-Blind Trial of Chemoembolization with or without Sorafenib in Unresectable Hepatocellular Carcinoma (HCC) in Patients with and without Vascular Invasion. PI: Carla Falkson, M.D.; 2012.

BIBLIOGRAPHY:

MANUSCRIPTS:
Published Manuscripts:


Manuscripts in Press:


Manuscripts Submitted:
1. Abdel Aal AK, Ciszak T, Saddekni A. The effect of time to occlusion and device oversizing on the safety and mid-term efficacy of the amplatz vascular plug 2 used in treatment of pulmonary arteriovenous malformations.


Manuscripts In preparation:
1. Biliary interventions.
2. Diagnosis and management of pulmonary arteriovenous malformations.
6. The use of amplatzer vascular plugs in different vascular territories.
7. Controversies in peritoneal dialysis catheter placement.

BOOKS:
Textbooks

Book Chapters

PUBLISHED ABSTRACTS:
6. Abdel Aal AK, Osman S, Hamed MF, Saddekni S, Oser RF, Underwood E. The dangerous pulmonary shunt: Endovascular management of pulmonary arteriovenous malformations. 96th Annual Conference of RSNA; Chicago, IL, USA, November 2010.


POSTER EXHIBITS:


7. Abdel Aal AK, Osman S, Hamed MF, Saddekni S, Oser RF, Underwood E. The dangerous pulmonary shunt: Endovascular management of pulmonary arteriovenous malformations. 96th Annual Conference of RSNA; Chicago, IL, USA, November 2010.


ORAL PRESENTATIONS:

1. **Abdel Aal AK.** Color Doppler assessment of scrotal swellings. Fifth international congress of ultrasonography, in collaboration with Hanover University (Germany) and the British Medical Ultrasound Society; Cairo, April, 2000.

2. **Abdel Aal AK.** Role of MRI in diagnosis of neonatal hypoxic ischemic injury. Annual Neonatology Meeting of Cairo University; Cairo, March 2003.

3. **Abdel Aal AK, Osman S, Hamed MF, Saddekni S, Underwood E, Oser RF, Borghei P.** Calculating the occlusion time for Amplatzer Vascular Plug II used in treatment of pulmonary arteriovenous malformations helps determine its safety. 96th Annual Conference of RSNA; Chicago, IL, USA, November 2010.

4. **Abdel Aal AK, Pearce J, Osman S, Kim Y.** Subclavian steal phenomenon on MRI: How can we steal the diagnosis without contrast enhanced MRA. ARRS 2011 annual meeting; Chicago, IL, USA, May 2011.


**Invited Lectures and Workshops (National and International):**
1. Director, Panelist, Moderator and Lecturer, Symposium for Academic Interventional Radiology, Ashville, August 2013.

**Invited Lectures and Professorships (Local and Regional):**
5. “Advancing Peritoneal Dialysis: Do we ‘walk the walk’ or just ‘talk the talk’?" UAB Nephrology grand rounds, August 2012.
10. Director, Panelist, Moderator and Lecturer, Symposium for Academic Interventional Radiology, Ashville, August 2013.

**MISCELLANEOUS:**
3. I am a member of the advisory committee of the following submitted grants:
   - Hemodynamics and ETS-1 in Arteriovenous Fistula Dysfunction.
- Dynamic contrast enhanced ultrasound in evaluation of TACE treatment.
4. I am an investigator on the following submitted grants:
- Use of Magnetic Resonance Imaging (MRI) angiography and Optical Coherence Tomography (OCT) to predict progressive Intimal hyperplasia and early graft thrombosis in arteriovenous graft (AVG) thrombosis.

**Mentorship:**
I am supervising the medical doctorate thesis of an instructor in the Radiology Department, Zagazig University, Egypt. The title of the thesis is: "Recent advances in trans-arterial therapy of hepatocellular carcinoma: A comparative study between Trans-arterial chemoembolization with lipiodol versus Trans-arterial chemoembolization with drug-eluting microspheres".

**Community Service:**
1. I serve as a volunteer doctor in an outpatient clinic in Hoover Crescent to serve the minorities.
2. I perform volunteer and charity procedures for patients without insurance coverage in the National Cancer Institute in Cairo, Egypt. I also train doctors and give lectures every time I visit this institution.
3. I am a volunteer soccer coach for minority children under 8 and 10 years. I am also a professional soccer coach in Hoover Soccer Club, and a certified soccer referee.
Interventional Nephrology Handbook

Roman A. Shingarev, M.D.
Assistant Professor of Medicine and Radiology
Director of Interventional Nephrology
January 1, 2014
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I. GENERAL DESCRIPTION

A. Introduction

The purpose of this document is to acquaint the Division of Nephrology and Interventional Radiology with the basic mechanics of the clinical rotation of Interventional Nephrology at the University of Alabama at Birmingham and provide a reference source for policies and procedures. This program will last one (1) academic year.

The Division of Nephrology Director, Dr. Anupam Agarwal, the Nephrology Fellowship Program Director, Dr. Daniel Balkovetz, the Director of the Interventional Nephrology Fellowship, Dr. Roman A. Shingarev, the Director of Interventional Radiology, Dr. Ahmed Kamel, and Dr. Michael Allon hold ultimate responsibility for the clinical rotation of Interventional Nephrology. They are assisted by the clinical faculty of the Nephrology and Interventional Radiology Divisions. This committee will meet quarterly or more frequently if requested by the director to review the progress of the rotation, discuss any changes in the program, and to update the members on recruitment. Jessica Hargrove (Nephrology) and Natasha Millet (Interventional Radiology) will serve as the Interventional Nephrology rotation coordinators, and will be the contact persons for all issues related to the rotation.

The activities of the interventional nephrology rotation encompass three major areas: clinical services, research programs, and teaching activities. The interventional suite is located on the University of Alabama at Birmingham Medical Center campus on the sixth floor of the North Pavilion Building in the Heart Vascular Center (HVC room #5).

The interventional nephrology rotation will offer a position for one (1) fellow in his/her third year of nephrology. Each year a 3 to 4 month rotation will be offered to 3 to 4 second year fellows in the UAB Nephrology Fellowship program. The third year position is available to fellows interested in interventional nephrology procedures, research in vascular access for hemodialysis, and a career in academic medicine. During their rotations, fellows will participate actively in the inpatient and outpatient services for interventional nephrology procedures. Research opportunities for fellows are available in a variety of laboratories throughout the Medical Center. Faculty mentors from either Nephrology or Interventional Radiology will be available. Research experiences may be supported by NIH training grants.

B. Clinical Services

Inpatient/Outpatient Services:
The third year Interventional Nephrology fellow will rotate through the program in blocks of one month for no more than 6 to 8 months of the year. The other months will be dedicated to either teaching or research. During the rotation, the fellow will spend between 2 to 4 days per week (depending of the schedule) in the interventional radiology suite with either a Nephrology or Radiology attending. He will be either a primary or secondary operator since interventional radiology fellows are also involved in some of the cases. Patients will come from either one of the inpatient services (ward, acute, chronic or vascular access services) or they are scheduled as outpatients by the access coordinator (Marty Middlebrook / Erin Estrada). The outpatients will come to the Heart and Vascular Center located on the University of Alabama at Birmingham Medical Center campus on the sixth floor of the North Pavilion Building.

The second year fellows will rotate in blocks of 1 to 2 months.

Procedures available for Interventional Nephrology:
Tunnel catheters
Non-tunneled catheters
Tunneled catheter exchange
Venogram for venous mapping
Fistula Angiograms
Fistula angioplasty
Fistula thrombectomy
Graft Angiogram
Graft angioplasty
Graft thrombectomy
Stent deployment
Obliteration of accessory vein
Peritoneal catheter placement
Peritoneal catheter-gram
Real-time ultrasound-guided kidney biopsy

C. Research Programs

The interventional nephrology faculty members are involved in a wide variety of research programs. There are basic research laboratories working in the areas of vascular biology, in particular investigating endothelial cell function and stress response. There is a clinical trial evaluating novel diagnostic imaging techniques for maturing dialysis shunts. There are several retrospective clinical research studies investigating outcomes of angioplasty and thrombectomy in specific patient populations. The research activities in the Interventional Nephrology Program will provide opportunities to fellows to learn specific research methodologies and play a critical role in the development of an academic portfolio for those fellows interested in pursuing a career in academic medicine.

D. Teaching Activities

The teaching activities of the Interventional Nephrology Fellowship are carried out with regularly scheduled teaching conferences. Fellows are encouraged to actively participate in all conferences and will be responsible for leading discussions and presenting several conferences throughout the year.

II. OVERVIEW OF INTERVENTIONAL NEPHROLOGY ROTATION

A. Mission Statement

The mission of the Interventional Nephrology training program is to produce physicians who are clinically competent in the field, and possess habits of life-long learning to allow for continued growth in knowledge, skills and other aspects of a professional career in Interventional Nephrology.

B. Specific Goals

The specific goals of the training program are derived from the Mission Statement:

1. The training of clinically competent Interventional Nephrologists.

Clinical competence is essential for all physicians. Clinical competence in Interventional Nephrology is defined as:
a. A basic core understanding of anatomy, histology, physiology, genetics, pharmacology, epidemiology, statistics, and procedures relative to the practice of Interventional Nephrology.

b. A basic core knowledge of the pathogenesis, histopathology, pathophysiology, clinical manifestations and management of vascular access for hemodialysis, access for peritoneal dialysis, general knowledge of diagnostic renal ultrasonography and real-time ultrasound guided kidney biopsy.

c. The clinical skill of data collection including history-taking, physical examination and the appropriate use of radiologic and laboratory tests particularly as pertaining to the diagnosis of vascular access for hemodialysis, peritoneal dialysis and kidney biopsy.

d. The ability to formulate appropriate differential diagnoses and therapeutic plans based on an ability to critically analyze the clinical data and integrate this analysis with the basic fund of medical knowledge in regards to the practice of Interventional Nephrology.

e. The knowledge of the treatment of the common and uncommon problems encountered in the practice of Interventional Nephrology including an understanding of the principles, indications, contra-indications, risks, costs and expected outcome of the various treatments.

f. The performance and/or interpretation of diagnostic and therapeutic procedures common in the practice of Interventional Nephrology.

g. The ability to perform competently as a primary operator in all procedures included in the practice of Interventional Nephrology.

h. The ability to recognize the need and appropriately seek input from colleagues in other specialties through consultation.

i. The development of qualities of professionalism and humanistic skills including integrity, compassion and respect for patients, peers, and paramedical personnel.

j. An understanding of current research methods. All fellows must be capable of demonstrating an understanding of the design, implementation, and interpretation of research studies, specifically research methodology, critical interpretation of data, critical interpretation of published research, and the responsible use of informed consent.

2. The development of skills and habits of professional life-long learning in Nephrology trainees.

Continuous education is an essential component for clinically competent Interventional Nephrologists and required for the acquisition, critical analysis, synthesis, and reassessment of knowledge, skills and professionalism. The Director of the program will foster and support this by encouraging:

a. Independent study habits in the acquisition of clinical, interventional, and research knowledge and skills.

b. Active participation in the Division of Nephrology and Division of Interventional Radiology educational conferences including regular attendance and presentation of selected topics.

c. Attendance and participation at regional and national professional clinical and/or scientific conferences for Interventional Nephrology and Interventional Radiology.

C. Specific Objectives

Upon the completion of the Interventional Nephrology Fellowship training, the fellow should have mastered the following specific objectives as they pertain to each of the specific goals of the curriculum:

1. Specific objectives which will foster the training of clinically competent Interventional Nephrologists include:
a. Mastering those specific clinical objectives for Interventional Nephrology.
b. Developing proficiency as a primary operator in all procedures related to Interventional Nephrology (see section 1 B)
c. The development of proficiency in Interventional Nephrology skills to a level at which trainees are not only able to demonstrate their own proficiency, but are capable of teaching these skills to junior trainees.
d. The development of humanistic approach and professionalism to a level that serves as a model for more junior trainees.
e. The development of a familiarity with areas of active Interventional Nephrology research such that trainees have an understanding of some of the major research questions in the field and an appreciation of the design, performance, potential strengths and shortcomings of a variety of experimental protocols.

2. Specific objectives to foster the development of skills and habits of professional life-long learning in Nephrology include:

a. Regular attendance at the Division of Nephrology and Interventional Radiology teaching conferences and participation in the coordination of conference topics and schedules.
b. Demonstration of mastery of teaching skills through interaction with trainees in junior levels of training including supervised teaching interactions with junior-level fellows, residents and medical students.
c. Involvement in a research project related to Interventional Nephrology sufficient to enable submission of work as first author for either presentation at national or regional scientific meetings or in peer-reviewed journals.
d. Successful grant application for research funding (for fellows planning to go on to an academic career).

D. Methodology for Teaching Interventional Nephrology

1. Interventional Nephrology Service
The Interventional Nephrology Service is an inpatient/outpatient service designed to care for patients with end-stage kidney disease (ESRD) and chronic kidney disease (CKD) who require diagnostic and/or treatment related to vascular access for hemodialysis, peritoneal dialysis, or kidney biopsy. The Interventional Nephrology service sees patients on the 6th floor of the North Pavilion building, Heart Vascular Center (room # 5). The Interventional Nephrology team includes the Nephrology attending, Interventional Radiology attending, and one Nephrology fellow each month. Close supervision and proctoring will be provided by the interventional nephrology or radiology attending throughout the year. This will be implemented in conducting preprocedure morning rounds to provide an opportunity for the fellow to present patients' dialysis vascular access problems and diagnostic/therapeutic approach and to provide the objective critique. In the interventional suite the fellow will be accompanied by the attending for an immediately available assistance. Depending on the progress demonstrated by the trainee, more independence will be granted to the trainee in the decision-making and operating spheres.

Responsibilities of the nephrology fellow on this rotation include, but are not limited to:

(1) Evaluating the need for dialysis in patients who come to the Heart Vascular Center for an Interventional Nephrologic procedure.
(2) Be the primary or secondary operator of the Interventional Nephrology procedures.
(3) Performing or guiding first year Nephrology fellows in renal biopsies in outpatients and inpatients.
(4) Follow-up all patients who underwent an Interventional Nephrologic procedure until they are discharged from the Heart Vascular Center.
Essential in this role is the development and refinement of clinical skills in the evaluation, diagnosis, treatment, and follow-up of patients with vascular access issues. These skills include developing appropriate differential diagnoses, assessing the need for hospitalization, and implementing diagnostic strategies and treatment plans. Through this experience the fellow will also develop a comprehensive understanding of the indications, contraindications, techniques, and complications of vascular access for hemodialysis, peritoneal dialysis, vascular access placement, and renal biopsies. The fellow will also acquire skills in educating patients about these procedures and in obtaining informed consent.

E. **Interdisciplinary Interactions**

The third year fellow also will be provided with the opportunity to interact with staff of the Interventional Radiology Division.

Second year fellows can elect to rotate and receive training in Interventional Nephrology. This rotation is typically 1-2 months of exposure depending on the fellow’s goals.

F. **Didactic Instruction**

1. **Lectures and Courses**

   Prior to initiating hands-on training in July the interventional nephrology fellow will:
   a) Attend a formal imaging and radiation safety lecture read by Michael V. Yester, PhD.;
   b) Complete an online course in conscious sedation available through UAB Faculty and Staff Learning System;
   c) Obtain a basic training in dictating radiology reports using Powerscribe 360 software;
   d) Participate in the guided tour of facilities to familiarize him- or herself with basic equipment available.

2. **Didactic conferences**

   The Interventional Nephrology fellow is encouraged to attend all the conferences held on a regularly scheduled basis by the Division of Nephrology. A monthly Vascular Access for Hemodialysis conference is scheduled every third Wednesday of the month. The Interventional Nephrology fellow is encouraged to attend the Interventional Radiology conference every Tuesday at the Heart Vascular Center conference room and to the monthly Morbidity and Mortality report conference held every third Thursday of the month. In addition, the interventional nephrology attending and fellow will have one-on-one hour-long meetings every Friday to discuss methodology aspects of the subject of Interventional Nephrology. In the first quarter of the year, most of the attention will be dedicated to vascular dialysis access options, the basic anatomy for dialysis vascular access, physical exam, and major therapeutic approaches to possible access complications. These seminars will be based on the material published in the Atlas of Dialysis Vascular Access and interactions with patients. As the year progresses, the attention will be shifted to indications for interventions, performance of advanced procedures, such as vein obliterations, and approach to procedural complications. Interventional Nephrology Principles and Practice textbook will be used for these seminars, along with journal articles and local case reports.

G. **Research Experience**

The primary goal of the research experience is for the fellow to learn sound methodology in designing and performing research studies and the correct interpretation and synthesis of research data. During this phase of training, the fellow will work under close guidance of the
research mentor from either the Nephrology or Interventional Radiology Divisions. Fellows working on specific research projects will be given adequate uninterrupted, protected time to pursue the research goals. Another goal of the research experience is to develop a body of work suitable for presentation at national scientific meetings and publication in peer-reviewed journals. For those fellows who are interested in an academic career, this body of work should lay the foundation for applications of extramural funding.

H. Experience In Developing Teaching Skills

All fellows, but particularly senior fellows, will be encouraged to educate medical students, resident physicians, other allied health personnel, and patients. These teaching activities will be observed by faculty whenever practical so that feedback can be relayed to the fellow.

I. Methods of Evaluation

An evaluation process, including evaluations of the individual fellow, of the program, and of individual faculty, has been designed so the Fellowship program to assess its ability to meet its goals and objectives. Faculty evaluations of Fellows are completed monthly at the end of the rotation. We use the E*VALUE electronic evaluation system.

III. BASIC POLICIES

A. Interventional Nephrology Support Services and Facilities

1. Interventional Nephrology Suite

The Interventional Nephrology suite is located at the North Pavilion building, sixth floor in the Heart Vascular Center room # 5. The suite is fully equipped with the latest technology (fluoroscopy and ultrasound). It is staffed by one full-time interventional nephrologist, 4 full-time interventional radiologists, 4 radiology technicians, and 4 registered nurses. Also, we have a well-established vascular access program staffed by two full-time access coordinators.

2. Computer Support

Fellows will receive training at the beginning of the rotation regarding entering procedures, notes, and complications into the software dedicated for this purpose.

3. Medical Records

In addition to the medical records kept by the University Hospital, the Kirklin Clinic, the VA Hospital, and Cooper Green Hospital, the Division maintains a set of records on each patient seen by the service. Fully electronic medical inpatient and outpatient records are maintained on Citrix Impact Web Interface and are available to Nephrology Fellows and house staff throughout the hospital including the HVC and at home. Citrix Interface is also linked to Philips iSite Enterprise Image Viewing database used by UAB radiologists.

4. Copies

An office copier is available to Nephrology Fellows on the 6th floor of the Tinsley Harrison Tower building. Fellows may obtain a code for the copier from the Fellowship Coordinator, Ms. Jessica Hargrove.

B. Books and Reading Materials
Textbooks.

Websites
ASDIN. American Society of Diagnostic and Interventional Nephrology. http://www.asdin.org

Journals
• Seminars in Dialysis
• Journal of Interventional Vascular Radiology

C. Duty Hours and On-Call Responsibilities

1. Duty Hours
The schedule is made in conjunction with the Interventional Radiology Division. Natasha Millet will send the schedule to the fellow prior to the days to be worked (once a week).

D. Procedure logs
Requirements for the American Board of Internal Medicine certification in the subspecialty of Nephrology require demonstration of competence in the following procedures (the minimum requirements per UAB are listed in parentheses next to each procedure):

a. Percutaneous biopsy of autologous kidneys (5)
b. Percutaneous biopsy of transplanted kidneys (5)
c. Placement of temporary vascular access (i.e. vascath) for hemodialysis and related procedures (5)
d. Peritoneal dialysis (20)
e. Acute hemodialysis (20)
f. Maintenance chronic hemodialysis (20)
g. Continuous Nephrology replacement therapy (20)
h. Post-op management of transplanted patients (10)
i. Follow-up with transplanted patients in clinic (20)
j. Removal of tunneled catheters (5).

Requirements for the American Society for Diagnostic and Interventional Nephrology (ASDIN) certification in Interventional Nephrology require demonstration of competence in the following procedures:

1. Certification for peritoneal catheter placement (6).
2. Certification for hemodialysis vascular access procedures
   Tunnel catheters (25)
   Non-tunneled catheters (25)
   Fistula or Graft Angiograms (25)
   Fistula or Graft angioplasty (25)
   Fistula or Graft declot (25)
   Stent deployment (5)
   Obliteration of accessory vein (5)
Each fellow is required to keep a log of the supervised procedures performed during the course of his/her Fellowship. All fellows will be required to enter an electronic log in the E-value System all clinical procedures performed, identifying the procedure, date, indication, outcome, complication, and name of supervising physician. It is imperative that these logs be completed so that there is adequate documentation of fellows’ procedural competency. A copy of completed procedure logs should also be kept by each Nephrology Fellow for his/her records.

IV. DETAILED DESCRIPTION OF PROCEDURES

A. Interventional vascular procedures

Detailed explanation on the procedures will be found in the textbook: Interventional Nephrology Principles and Practice. Ed. Yevzlin, Salman, Asif, Springer Publishers, 2014

B. Renal Biopsies

Percutaneous renal biopsies will be performed by the Nephrology fellow in the Heart and Vascular Center (room #4 in the PRU) under the direct supervision of the attending Nephrology physician. Risks and benefits of Nephrology biopsy should be discussed with each patient prior to the procedure by the attending physician and/or fellow doing the procedure. This discussion, including a list of risks and alternative treatments discussed with the patient, should be documented in the medical record. Following this, a consent form should be signed by the patient and witnessed by one of the nursing staff.

All biopsy specimens will need to be placed in the appropriate media and taken to the Pathology Department on the 3rd floor of the North Pavilion. The specimen should be accompanied by a specimen card. The media and the specimen cards are located in the Pathology lab. There is a refrigerator in the Inpatient Dialysis Unit (IDU) where extra media and cards are kept by fellows for convenience.

The transplant evaluation fellow will be performing all scheduled outpatient and inpatient biopsies in the Heart and Vascular Center on the 6th floor of the North Pavilion. The outpatients will be kept there for post-procedure monitoring while the inpatients will be transported back to the hospital floor. Both inpatients and outpatients will be watched for 8-10hrs post-biopsy. All biopsies will be under the supervision of an attending.

C. Emergent Hemodialysis of patient admitted to the Heart Vascular Center

The activities and policies of the dialysis facilities at University Hospital are detailed below. The Interventional Nephrology fellow is responsible for calling the chronic fellow for scheduling emergent hemodialysis for patients admitted to the heart vascular center.

Femoral punctures for hemodialysis of stable patients who lack vascular access should be performed by the chronic fellow under the supervision of the attending physician. In general, Fellows should try to avoid placing femoral catheters by planning in advance to have an IJ access placed by Interventional Nephrology. The Access Coordinators, Mr. Marty Middlebrook and Ms. Erin Estrada, will facilitate such procedures.
At the present time a quality improvement project is being pursued to provide indication guidelines for emergent hemodialysis and the standard operating procedure to dialyze these patients.

V. EVALUATION OF THE FELLOWS

- After each monthly clinical rotation, the supervising Attending Physician will evaluate the Fellow by completing an electronic evaluation in the E-Value System. All faculty must complete the form prior to the completion of the rotation and review their impressions directly with the Fellow.
- During the research phase of training, an electronic evaluation form will be completed by the Fellow's research faculty mentor. These evaluations forms are completed every research month, reviewed with the Fellow by the faculty research mentor, and submitted to the program director for placement in the Fellow's permanent file.
- The program director is immediately notified by the E-Value System of any evaluations that contain a rating less than satisfactory in any category. The program director will immediately meet with the Fellow to identify causes for the poor performance and the means for improving the deficiency.

VI. EVALUATION OF THE FACULTY AND PROGRAM

- After the interventional nephrology rotation, the fellow is required to complete an evaluation electronically of the faculty and that specific rotation. The pooled results will be evaluated for specific weak areas by the program director and the division director.
- Evaluations of the faculty by the fellows will be done annually by completing an electronic form based on the standardized ABIM evaluation form. The goal is to maintain as much anonymity as possible, so that the Fellow feels comfortable and will be frank with the process. Evaluations of the program director will be reviewed by the Division Director.
- Fellows are encouraged to maintain a high level of communication with the program director and faculty. Periodically, meetings will be held between the Fellows and program director in place of the weekly Fellows' Conference. These meetings will be used to disseminate information, receive timely feedback, etc.
- The feedback received during informal meetings, formal meetings and the semi-annual evaluation form will be discussed by the Fellowship Committee and used to make programmatic changes as appropriate.
- The Fellows will evaluate the program yearly through an electronic form based on the standardized ABIM form.

VII. DISCIPLINARY PROCEDURES

UAB Graduate Medical Education Policies and Procedures will be followed.

VIII. MISCELLANEOUS
A. Facility description

Space:
The new Heart & Vascular Center is one of the largest in the southeast encompassing 55,000 square feet of the latest technology available. It has 13 labs, which include the latest digital, flat plate technology for the best imaging and reduced radiation exposure. It was built to allow for expansion of more suites in the future.

The center includes 48 beds for prep & recovery, 22 of these are private rooms for our outpatients to stay in with their families until discharge. There are 26 additional beds for patient care, all with the latest in electronic monitoring and documentation systems.

The Heart and Vascular center is located on the 6th Floor of the North Pavilion of UAB Hospital and is arranged for efficient use of each of its 13 Procedural Labs:
* 4 Vascular Interventional Radiology (VIR) labs (including one for interventional nephrology)
* 3 Electrophysiology (EP) labs
* 4 Adult Care (ACL) labs
* 1 Pediatric Cardiac lab
* 1 Neuro-interventional lab

Equipment:
Angiographic unit (digital) flat screen: Single plane, PHILLIPS EXPERT 2020
Ultrasound unit with color Doppler: TOSHIBA: APLIO SSA-770A
Patient monitoring equipment: O2 saturation monitor, Automated blood pressure monitor EKG recorder. Defibrillator available.

Supplies:
The interventional radiology suite is fully equipped and all supplies are kept in a central unit located 30 feet from the suite. Essential supplies i.e., permanent catheters, micro-puncture kits, endovascular lines catheter sheaths and different size angioplasty balloons are kept in the interventional suite and re-stocked on a daily basis.

Nurse/Patient Ratio:
* Variable depending upon specific procedure type
* 1:1 for procedure
* 1:3-4 for pre-procedure workup
* 1:2 for immediate post-procedure period

Radiology technician Ratio:
* 1:1 for procedure

Skill Mix:
* Registered Nurse
* Patient Care Technician
* Radiology technician

B. Record keeping:
Dictation: Dictation is a crucial part of each interventional radiology procedure. In addition to providing the major piece of documentation for the medical record and a guide for future intervention, all billing is based on the dictated report. It is, therefore, critical that all dictations be accurate and complete.
All reports are dictated in **POWERSCRIBE 360**. New residents and fellows receive passwords and training on arrival at UAB. All cases should be dictated before the end of the day.

**Dictation Format:**

**Names of Physicians Involved**  
Indicate first & last names, and level (Staff, Fellow, and Resident)

**Patient Name and MRN**  
Procedure(s) Performed

**Indications/Clinical History** - This must provide justification for the procedure.  
**Technique/Findings** - This section should include a detailed, step-by-step description of the procedure. Findings should be dictated with each step.

It is crucial to be specific about the type of guidance used. For example, fluoroscopic or ultrasound guidance, or both. If US of a body part such as the neck or RUQ is performed to evaluate access this should also be stated. For example, “US of the right neck was performed and demonstrated a patent right internal jugular vein.”

In selective arterial and venous cases each selective catheter position and injection should be mentioned along with the findings. Each branch and division has a higher code and therefore you should be specific.

Pressures should be recorded if applicable. Any complications should be described.

**Impression** – It is the summary of the procedure and findings. Typically this section is a numerical list. When appropriate, a plan should be outlined for the patients' future care.

**Disclaimer** – When an attending physician is involved the appropriate statement should be appended to the end of the report and reads as follows...

*AS THE ATTENDING INTERVENTIONAL NEPHROLOGIST, I HAVE DIRECTLY PERFORMED AND OR SUPERVISED THIS PROCEDURE AND HAVE REVIEWED, AND AGREE WITH THE WORDING OF THE ABOVE REPORT.*

**Discharge Summary** – All outpatients must have a dictated discharge summary at the end of the dictation. This is hospital policy. The template is available as “Macro Discharge” and reads as follows...

**DISCHARGE SUMMARY:**  
Reason for hospitalization:  
Discharge Diagnosis:  
Procedure Physician(s):  
Procedure(s):  
Condition at Discharge:  
Discharge Medications:  
Discharge Instructions: Call if fever greater than 101 degrees, pain, discharge, or bleeding develop within 48 hours. Written discharge instructions given to patient.  
Follow-up: Patient to follow-up with referring physician.

**Database record keeping:**
The dialysis coordinators maintained a detailed and complete database of all ultrasound studies, peritoneal access and vascular access procedures performed by interventional nephrology, interventional radiology, ultrasound department and vascular surgery.

C. Quality Assurance Program:

HI-IQ Data Entry Guide
Introduction
HI-IQ is the result of an 85-page specification given at the 1993 18th annual SCVIR scientific meeting in New Orleans. Every aspect of the system has been designed by those who use it, in direct response to their needs of other SCVIR members.

At one point, HI-IQ was used for scheduling, inventory, and QA purposes. Since the move to the new HVC facility in July 2006, HI-IQ has returned to being used solely for QA purposes. It remains the best system we have for tracking cases and complications. Currently, HI-IQ is our procedure log, complications log and quality assurance database all in one. It is important that the HI-IQ data be as accurate and complete as possible. It provides a simple, concise way to accumulate and review data for presentation at the Morbidity & Mortality conferences.

HI-IQ also contains data that are needed by the section for use in requests for staffing increases and new equipment, credentialing and turf battles, fellowship accreditation, clinical research, and for JCAHO and Health Department inspections.

Key Elements:
A. Patient Master Record

A core data element in HI-IQ is the patient master record. Each patient defined in the system has one such record, to which all individual's encounter information is attached as it accumulates. All of the standard patient demographic information may be stored in the patient master record. Patients also have four possible ID numbers, one of which should uniquely identify the patient and may be configured on a hospital-by-hospital basis. The choices are: social security number, hospital number, x-ray number, or HI-IQ number (an internally generated code).

A referring physicians list is included in the patient master record, and a freeform notes field is also provided, allowing you to specify any additional information you wish to note. The size of the notes field is unlimited, and the data inquiry engines can search this field for anything you specify, making it extremely powerful.

B. Encounters

Once the patient master record has been created, encounter records may be defined. An encounter is a record of a single diagnostic and/or therapeutic event on a given day, which may consist of one or more services performed. The encounter record contains an operating physician list (in which operator roles may be assigned, such as primary physician, supervisor, 1st assistant, etc.) and a copy of the referring physician list from the patient master record, which may be freely modified.

Services may be specified in a number of ways; a “Service” menu in the menu bar contains the full five-level hierarchy of SCVIR-defined services, from which services may be selected simply for automatic inclusion. A separate service tree screen may also be employed if you wish to specify non-specific services, such as diagnostic autobiography.
The **indications** screen allows specifying indications for individual services performed in the encounter and/or for the encounter as a whole. The indication codes designed by the SCVIR electronic data committee are preinstalled and presented in lists, from which you may select the appropriate codes with a simple point-and-click interface.

The **complications** screen allows specifying complications, which occurred for any individual service(s) in the encounter, and/or for the encounter as a whole. The complication codes designed by the SCVIR electronic data committee are preinstalled and presented in lists, as with indication codes, and the same point-and-click interface allows you to specify complications where they occurred. Complications also have an associated severity status, which you may specify as “major”, “minor”, or “pending”.

Pending **outcomes** may be specified; in such cases, reminders are automatically generated and inserted into the notes field of the patient encounter screen, so that they may be resolved as soon as the necessary information becomes available. If a complication is listed as “major” on the complications screen, HI-IQ automatically opens the outcomes screen with a prompt to describe its outcome.

The **diagnosis screen**, similar to the indication and complication screens, allows ICD9 diagnosis codes to be specified for individual services and/or for the encounter as a whole. The complete list of ICD9 codes is preinstalled and the same point-and-click interface allows you to easily select from them. The **CPT codes** screen allows specifying CPTs for individual services and/or for the encounter as a whole. The entire list of CPT codes is preinstalled, as with ICD9s, complications and indications, and the same point-and-click interface allows you to easily select from them.

All of this information together constitutes a patient encounter record. HI-IQ accumulates these records for each patient. Any patient encounter record may be viewed or edited at any time. Through the accumulation of such detailed information, combined with the extremely sophisticated data inquiry and reporting functions of HI-IQ, quality control may be immeasurably enhanced.

**D. Volume of Procedures:**

Interventional Radiology has served the nephrology for interventional procedures since the early 1990’s under the direction of Dr. Souheil Saddekni. In 2004 the Interventional Nephrology section was created under the direction of Drs. Ivan D. Maya and Souheil Saddekni and has been under the direction of Drs. Roman A. Shingarev and Dr. Ahmed Kamel since 2011.

Procedures performed from January 1, 2013 to December 31, 2013

<table>
<thead>
<tr>
<th>Service</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angiography</td>
<td>521</td>
</tr>
<tr>
<td>Angioplasty</td>
<td>434</td>
</tr>
<tr>
<td>Thrombectomy</td>
<td>221</td>
</tr>
<tr>
<td>Tunnel catheter placements</td>
<td>247</td>
</tr>
<tr>
<td>Tunnel catheter exchange</td>
<td>238</td>
</tr>
<tr>
<td>Non-tunnel catheter placement</td>
<td>45</td>
</tr>
<tr>
<td>Venograms</td>
<td>12</td>
</tr>
<tr>
<td>Stent deployment</td>
<td>56</td>
</tr>
</tbody>
</table>
Obliteration of accessory: 5
Peritoneal catheter placement: 5
Kidney biopsies: 133

E. Faculty / Attendings:

1. Roman A. Shingarev, MD. Interventional Nephrology.
5. Souhil Saddekni, MD. Interventional Radiology.
March 25, 2014

Accreditation Committee
The American Society of Diagnostic and Interventional Nephrology
124 Fairmont Street, Ste. B
Clinton, MS 39056

Dear Accreditation Committee,

This letter is to acknowledge that The Nephrology Division, Department of Medicine, at the University of Alabama at Birmingham will guarantee the salary for one fellow [$57,573.00 plus fringe ($12,320.00)] each year towards an Interventional Nephrology fellowship position. Funding sources from NIH training grants, as well as foundations (e.g., National Kidney Foundation, American Society of Nephrology) will also be sought to enhance funding opportunities for this program.

The Interventional Nephrology Section was created in 2004 in corroboration with our Interventional Radiology Section. The program has trained 6 PGY5 nephrology fellows since its inception until year 2010. It has since transitioned to a dedicated one-year position for PGY6 fellows in keeping with our vision to training qualified interventional nephrologists prepared for an academic career. Our goal is to expand the program by hiring a second interventional nephrologist in order to increase the number of fellowship positions. The program has the full support of the Division and the Department of Medicine.

I have utmost confidence that this program will flourish and will provide an excellent training for those interested in this field.

Sincerely,

[Signature]

Anupam Agarwal, MD
Director, Division of Nephrology
Marie S. Ingalls Endowed Chair in Nephrology Leadership
Professor of Medicine
UNIVERSITY OF ALABAMA AT BIRMINGHAM
INTERVENTIONAL NEPHROLOGY

CHANGE IN PROGRAM DIRECTORSHIP

Ivan D. Maya 10/15/2008 – 07/01/2010
Michael Allon 07/01/2010 – 09/01/2011
Roman A. Shingarev 09/01/2011 – current